Elementary Mathematics

Class Three

National Curriculum and Textbook Board, Bangladesh

Prescribed by the National Curriculum and Textbook Board
as a textbook for class three from the academic year 2024

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Preface

Primary level constructs the foundation of education. A set of well-defined targets and properly planned primary education provide strengths to the entire education system. Keeping this in mind, the primary level has been given supreme importance in the Education Policy 2010. Increasing the span and inclusiveness of the primary level, as the developed countries of the world, have been emphasised. Special attention has been given to ensure that no child's access to education is hindered by social and economic status, religion, ethnicity, or gender identity.

The National Curriculum and Textbook Board (NCTB) has implemented an integrated curriculum to update primary education. While this curriculum trails the pedagogy and the curriculum of developed countries, it also adopts traditional teaching-learning values of Bangladesh at the same time. This has enabled the education to be more life-oriented and productive. In the context of globalisation, the mental health of the children has also been specially considered in this curriculum.

Textbook is the most important component of curriculum implementation. NCTB has always borne that in mind while designing textbooks for all levels and classes including primary level. Curriculum goals and objectives have been prioritised in the writing and editing of each book. A keen eye has been kept on the diverse curiosity and capacity of the child's mind. Special importance has been given in designing the curriculum and the textbooks to make teaching-learning interactive and enjoyable. It is hoped that each book will help in the balanced psycho-physical development of children through educational activities. It will support in acquiring the required skills, adaptability, patriotism and moral values at the same time.

Elementary mathematics is a compulsory subject. Explanation, examples and pictures are used to present the content in an easy and simple way for the children. The "Let us do" activities have been incorporated along with examples to create interest among learners and make learning easier. Moreover, the contents of the textbook have been rearranged following the order of easy to hard. There is enough scope for practice in this textbook.

Special thanks to the specialists and teachers who worked intensively in writing, editing and revising the textbook. Thanks to those also who have made the textbook attractive to children through its design and illustration. This textbook has been revised to address the need in the changed context of 2024. Due to time constraints, some errors may still exist. Any constructive advice and guidance from the audience will be considered with due importance.

At the end, I wish every success of the learners for whom the book has been produced.

October 2024

Professor Dr. A K M Reazul Hassan
Chairman
National Curriculum & Textbook Board, Bangladesh

Explanation of the characters and symbols

1) Character: A dialogue between two students named Rafi and Tuli and comment by a parrot is shown in the textbook. The mathematical idea of the students would be clear through their discussion and opinion.

2) The steps have been indicated by using some symbols in the lesson.

Key question: Let us solve the problem together.

Task: Let's solve the problem after discussing with the friends and teacher.

Exercise: Solve the problem by logical thinking. Discuss with the friends and take assistance from the teacher if required.

Do it yourself: Let's do it ourselves.

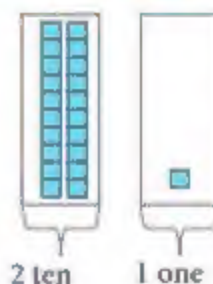
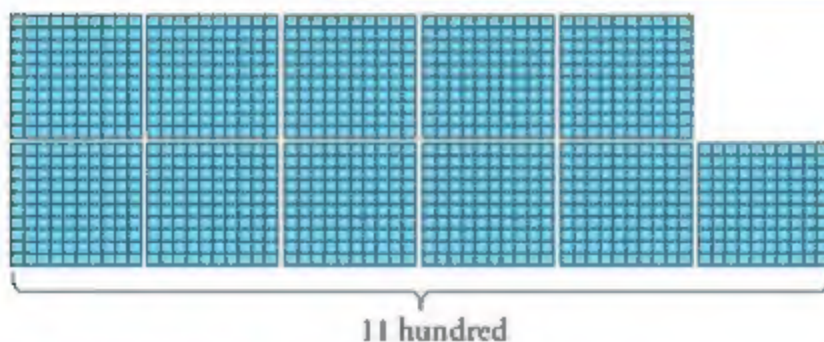
Table of contents

Numbers

Count, Read and Write

How many blocks are there?

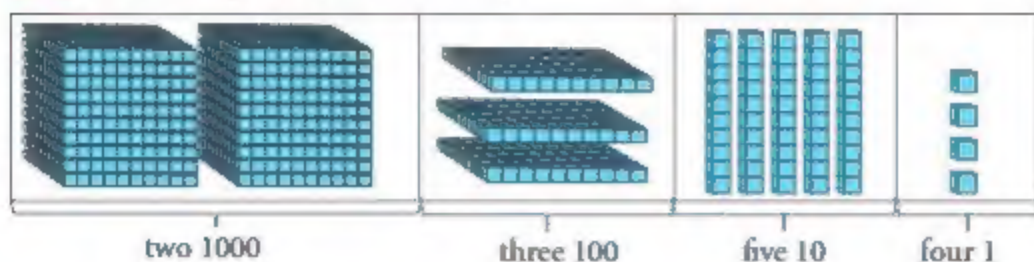
How do we count?

In grade 2, we made groups of 10 and 100 with blocks to count up to 1000.
I think we can easily count the blocks in the same way. But how to write it in number?

100 100 100 100 100 100 100 100 100 100 100	10 10	1
hundreds	tens	ones
11	2	1

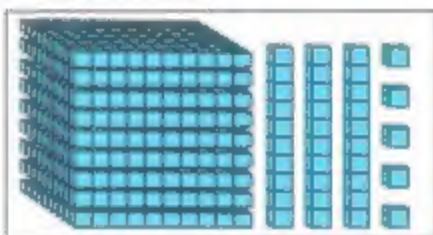
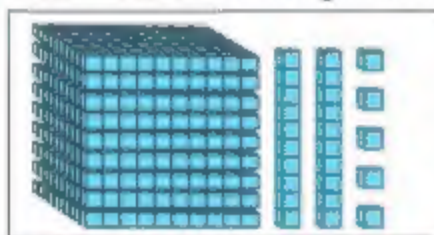
We have learned in grade 2 that 10 groups of 100 makes 1000.

So, this is one thousand one hundred twenty one and we write 1121.

2025

1 How many blocks are there?

thousands	hundreds	tens	ones
1000 1000	100 100 100	10 10 10 10 10	1 1 1 1

The number is two thousands three hundreds fifty four and we write 2354.

1. Which of the following boxes has 925 blocks?

2. Count and write in numbers

thousands	hundreds	tens	ones
1000 1000 1000 1000 1000 1000 1000 1000	100 100 100 100	10 10 10 10	1 1 1 1 1 1 1 1

The number is ....

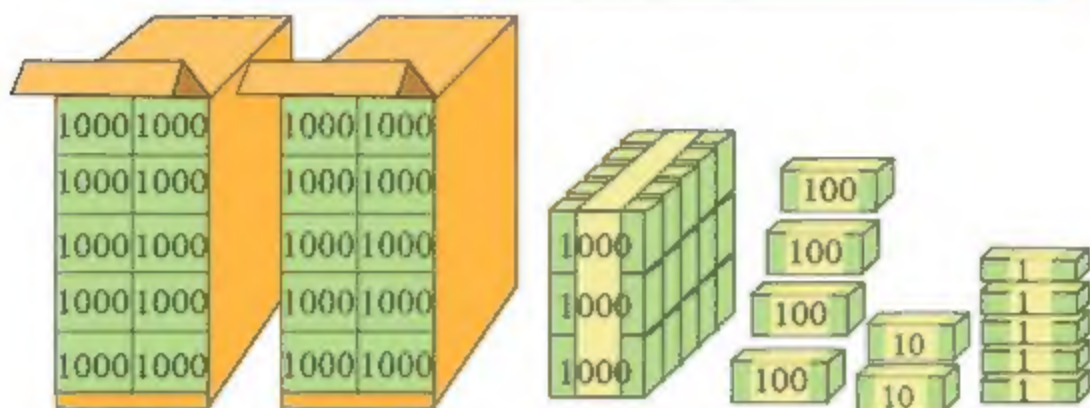
3. Let us read and write in words

(1) 1238 (2) 2815 (3) 3111 (4) 4335 (5) 5153

4. Let us write in digits

(1) One thousand one hundred thirty five (2) Three thousand nine hundred seventy nine
(3) Seven thousand eight hundred sixty nine (4) Nine thousand one hundred one

2025

The tickets shown in the following pictures will be sold for a cricket match.
(1) How many packets are there in the box?
(2) How many tickets are there in total?

How do we count so many tickets?

I think, we can count by groups of 1, 10, 100, 1000.

1000	1000
1000	1000
1000	1000
1000	1000
1000	1000

= 10000

There are 10 packets of 1000 in each of the big boxes in the above picture. That means the number of tickets is ten thousand and it is written as 10000. There are 2 such boxes in the picture. In these two boxes there are twenty thousand tickets altogether.

There are 3 thousand and 425 tickets more.

Ayuts	thousands	hundreds	tens	ones
10000 10000	1000 1000 1000	100 100 100 100	10 10	1 1 1 1 1

The number is twenty three thousand four hundred twenty five, we write as 23425

One Ayut is 10 thousand

1 How many thousands are there? What is the number?

1000	1000	1000	1000	1000
1000	1000	1000	1000	1000

Let us count how many 1000 are there.

1000	1000
1000	1000
1000	1000
1000	1000
1000	1000

The number is ______ or ______ Ayut.

Let us match by drawing lines

(1) Five thousand three hundred five

(2) Twenty two thousand seven hundred nineteen

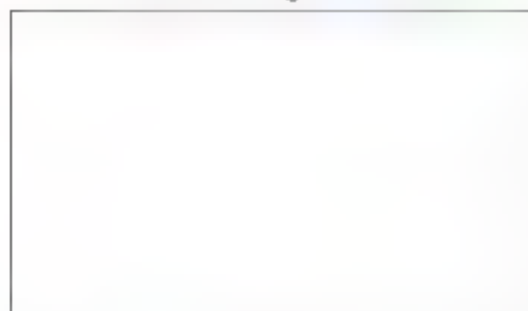
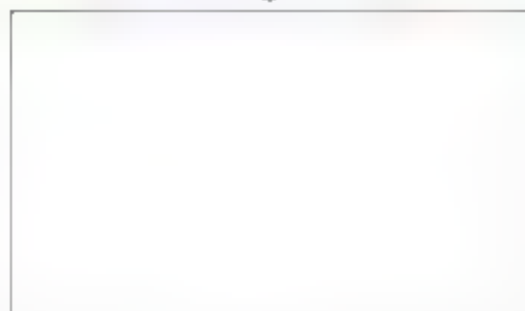
(3) Sixty three thousand seven hundred two

(4) Ninety nine thousand three hundred five

(5) Fifty one thousand three hundred five

(6) Five thousand five hundred three

2025

2 Let us count and write in numbers and words

Let us arrange the cards	Let us arrange the cards

Write in digits ____________ Write in digits ____________

Write in words ____________ Write in words ____________

3 Let us count and write in numbers.

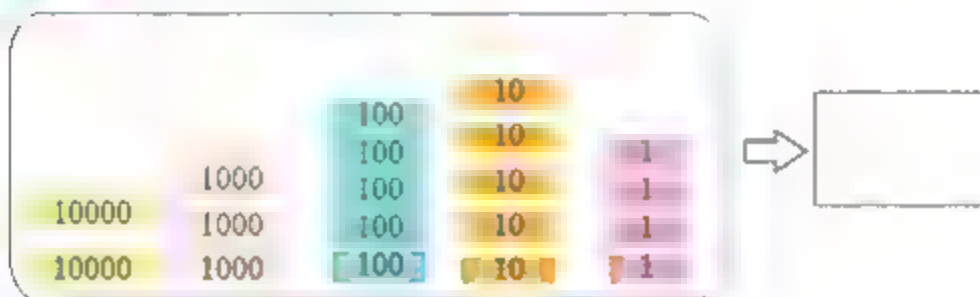
Ayuts	thousands	hundreds	tens	ones
10000	1000 1000 1000	100 100 100 100	10 10	1 1 1 1 1

The number is .. . .

4 Let us count and write in numbers

Ayuts	thousands	hundreds	tens	ones
10000 10000 10000	1000 1000 1000 1000		10 10 10	1 1 1 1

The number is . . . . Which digit is in the hundreds place?

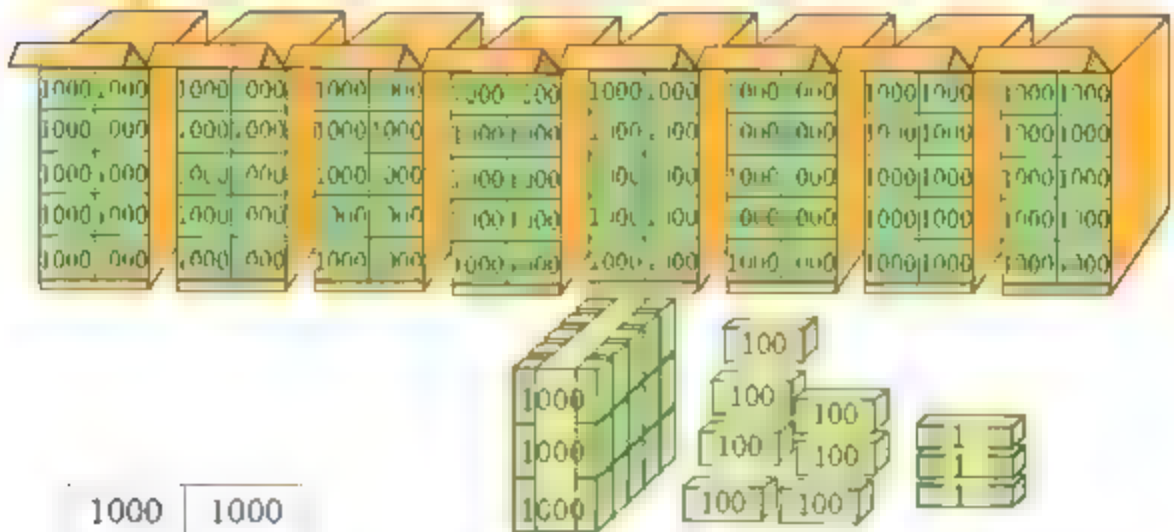
5 What is the number?

6 Let us write in digits

(1) Nine thousand nine hundred ninety (2) Nine thousand ninety nine
(3) Ten thousand (4) Ten thousand ten
(5) Thirteen thousand five hundred thirty two
(6) Twenty six thousand eight hundred thirty seven

7 Let us read and write in words

(1) 11238 (2) 17805 (3) 19111

(4) 13359 (5) 15153 (6) 27537

The tickets shown in the following pictures will be sold for a football match. How many tickets are there?

1000	1000
1000	1000
1000	1000
1000	1000
1000	1000

= 10000

There are 10 packets of 1000 in each of the boxes in the upper row. That means the number of tickets is ten thousand and it is written as 10000. There are 8 such boxes in the picture. These 8 boxes altogether have ninety thousand tickets.

There are more tickets in the picture. How will we count those?

Ayuts	thousands	hundreds	tens	ones

2025

We read the number as eighty three thousand four hundred seventy three and write it as 83473

8 3 4 7 3

	place value
3 ones	3
7 tens	70
4 hundreds	400
3 thousands	3000
8 Ayuts	80000

3000 and 80000 = 83 thousands

1. Let us read the following numbers aloud and write them in words. Find the place value of the digits as shown above.
   (a) 23517 (b) 51347 (c) 93007

1 Let us find the place value of the digits of 49037

4 9 0 3 7

	place value
7 ones	7
3 tens	30
0 hundreds	0
9 thousands	9000
4 Ayuts	40000

9000 and 40000 = 49 thousands

2. Let us fill in the blanks

13457= ☐ Ayuts ☐ thousands ☐ hundreds ☐ tens ☐ ones

7804 = ☐ Ayuts ☐ thousands ☐ hundreds ☐ tens ☐ ones

68005= ☐ Ayuts ☐ thousands ☐ hundreds ☐ tens ☐ ones

97842= ☐ Ayuts ☐ thousands ☐ hundreds ☐ tens ☐ ones

3 (a) What is the place value of 4 and 3 in the number 94230? What is the digit in Ayuts place in the number?
(b) What is the digit in thousands place of the number 86935?

Population of a union in Bangladesh is 100000 (approximately). How do we read the number?

It's easy. We can read it by forming groups of ten, hundred, thousand, Ayut as before.

I don't feel this is easy for me. Because there is no room for the place value of 1 at the left.

	Ayuts	thousands	hundreds	tens	ones
1	0	0	0	0	0

Here the new place value will be lakh.
1 Lakh means 10 Ayuts and it is written as 100000

name of place	Lakhs	Ayuts	thousands	hundreds	tens	ones
	1	0	0	0	0	0

1 00 000 — 1 lac or 100000

0 ones	0
0 tens	0
0 hundreds	0
0 thousands	0
0 Ayuts	0
1 Lakhs	100000

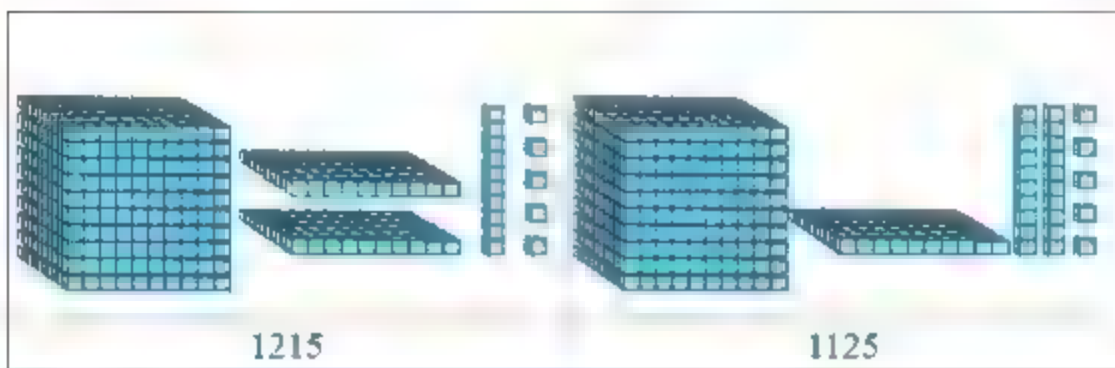
1. The total population of a municipality in Bangladesh consists of 80699 males and 76644 females. Read the two numbers aloud, write in words and find the place value of the digits.

2. Let us write the numbers at a and b on the number line.

7000 8000 a [ ] b [ ]

Comparison of numbers

Which number is smaller, 1215 or 1125?

Arrange the two numbers into groups of thousands, hundreds, tens and ones

Let us compare the groups of thousand

The groups of thousand are the same. So we will compare two numbers by groups of hundred. In 1215 there are 2 groups of hundred and in 1125 only 1 group of hundred. That means 1125 is smaller.

1 Let us compare the following two numbers:

32740 and 32940

It's very simple. We will compare from larger place value to the smaller place value one by one. First the place of Ayuts, then the place of thousands, then the place of hundreds, then the place of tens and finally ones place.

2025

Digits in Ayuts and thousands places are the same 3 and 2

Let us compare the digits in the hundreds place 7 is smaller than 9

So, 32740 is smaller than 32940

When we compare numbers, we use the symbols < and >.
32370 > 32320 The number 32370 is greater than 32320
43680 < 45400. The number 43680 is smaller than 45400.

2 Let us compare the following numbers and write < or > in the blank boxes.

(1) 1000 ☐ 999 (2) 2199 ☐ 2200

(3) 9469 ☐ 9496 (4) 13777 ☐ 13666

(5) 3896 ☐ 3289 (6) 45799 ☐ 46898

(7) 79980 ☐ 69988 (8) 99999 ☐ 100000

3 Let us write the following numbers from small to large and from large to small using symbols

Numbers	small to large	large to small
1999, 2000	1999 < 2000	2000 >1999
21111, 21109		
42586, 42585		
68990, 68888		
87109, 87099		

2025

1 Let us arrange the numbers from small to large.

37566, 38556, 37556, 39456

Let us compare the digits in Ayuts place

All digits are the same

Compare the digits in thousands place

$7 < 8 < 9$

37566 and 37556 have the same digit in hundreds place.

The digits in tens places of 37566 and 37556 are 6 and 5. $5 < 6$

Digit in ones place of both numbers is 6

So the numbers in ascending order are $37556 < 37566 < 38556 < 39456$

4 Let us compare the following numbers and arrange them in order from largest to smallest and from smallest to largest

4399, 5409, 5480, 4379	large to small	
	small to large	
24709, 35699, 36735, 47802	large to small	
	small to large	
75611, 75689, 77690, 78609	large to small	
	small to large	
91009, 91809, 90888, 91099	large to small	
	small to large	

2025

The salary structure of an industry worker is fixed in 5 grades Tk. 18257 in first grade, Tk. 15416 in second grade, Tk. 9845 in third grade, Tk. 9347 in 4th grade and Tk. 8875 in fifth grade has been fixed.

How can I read the salary easily in any grade?

We can easily read by using place value

1 Let us read the numbers and find the place value (One is shown)

1 8 2 5 7

Digit	Place value	Value
7	7 ones	7
5	5 tens	50
2	2 hundreds	200
8	8 thousands	8000
1	1 Ayuts	10000

1 Let us arrange the numbers from smallest to largest and largest to smallest using symbols.

18257, 15416, 9845 8875, 9347	small to large	
	large to small	

2 Sumona Apa bought a piece of jewellery weighing 1 bhori on the occasion of her brother's wedding last November 30. She needed 97779 taka to buy the jewellery. Write the value of the jewellery in words and find the place value of the digits used in the number.

3 Mangoes were sold for taka 89325 and taka 89775 from two mango orchards. Let us read the two numbers and indicate smaller or larger using symbol.

Ordinal Numbers

Line up the 20 students in your class in order of height from smallest to largest. Each student of the line will state his position in sequential number.

What is your position?

How many students are taller or shorter than you?

Write the names of the students standing in the order from smallest to largest as the ordinal position.

Position		Name
First	1st	
Second	2nd	
Third	3rd	
Fourth	4th	
Fifth	5th	
Sixth	6th	
Seventh	7th	
Eighth	8th	
Ninth	9th	
Tenth	10th	
Eleventh	11th	
Twelfth	12th	
Thirteenth	13th	
Fourteenth	14th	
Fifteenth	15th	
Sixteenth	16th	
Seventeenth	17th	
Eighteenth	18th	
Nineteenth	19th	
Twentieth	20th	

2025

1. Let us write the ordinal position according to the order of marks obtained in mathematics in your class

Name	Marks obtained in Math in order from highest to lowest	Ordinal position	Name	Marks in Math in order from highest to lowest	Ordinal position
Ovshi	100	first	Sami	80	
Shimu	98		Jyoti	79	
Emon	97		Samia	76	thirteenth
Tapon	95		Kabir	75	
Hiva	92		Raju	69	
Limon	90		Tithi	65	
Rekha	87		Arif	63	
Eti	85		Rifat	60	
Nabila	85		Mitu	58	
Dipu	82		Riya	56	

1. Let us paint the 12th ant from left in the following picture

2. Let us place ordinal number on the steps below

Number Pattern

Let us look at the following patterns carefully. Complete the patterns by filling in the blanks.

1) 7, 10, 13, ____, 19, ____, 25, 28, ____

2) 18, 20, ____, ____, 26, 28

3) 19, ____, 15, ____, 11, 9, ____, ____

4) 2, 4, ____, ____, ____, 12, ____, ____

5) ____, 29, 28, ____, 26, ____, 24

6) ____, ____, ____, 35, 40, 45 ____

Each pattern has a specific rule. It has to be found.

The rule for pattern 1 is +3 because there is an increase of 3 in each case.

1. Let us discuss with a classmate how to find out pattern rule for 1.

2. Let us find the rules of other patterns above and complete the pattern by filling in the blanks.

3. Let us make patterns as we desire and discuss it with our classmates.

1. Let us make 5 different number patterns with rule +3

Let us find the rules of the following patterns and complete the pattern by filling in the blanks.

1) 14, 18, 22, ____ , ____ , ____ rule: [+4]

2) 28, 26, 24, ____ , ____ , ____ rule: [ ]

3) 65, ____ , 75, 80, ____ , ____ rule: [ ]

4) 36, 30, 24, ____ , ____ , ____ rule: [ ]

5) 77, 66, 55, ____ , ____ , ____ rule: [ ]

In the first pattern the next number is greater than the previous number in each case.

In each case there is an increase of 4. That is why the pattern rule will be +4.

1 Let us discuss with classmates how to figure out the rule for each pattern and find them out. Write the rules in the box.

1 Let us complete the pattern by filling in the blanks according to the rules.

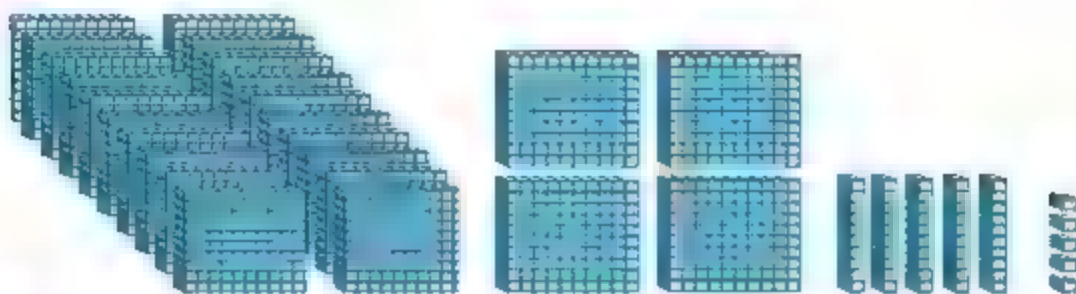
2 Let us create patterns for each rule below and discuss with classmates.

(a) +6 (b) +3 (c) –3 (d) –4

3 Let us make number pattern card similar to card as shown below and discuss with classmates.

front	back
15, 18, 21, 24, 27, 30	my rule is +3

Let us do

1. How many ▪ are there?

2. Let us answer the following questions

(1) How many 10000, 1000, 100, 10 and 1 are there in the box?

(2) What is the number?

3. Let us write in digits.

(1) Thirty thousand six hundred five

(2) Seventy seven thousand five hundred sixty three

(3) Eighty seven thousand seven

(4) Number formed by eight 10 thousand and four 1 thousand

(5) Number formed by eight 10 thousand, nine 1 thousand and nine one

(6) Number formed by Nine 10 thousand, nine 1 thousand, nine 1 hundred, nine 10 and nine 1

4 Let us tick (√) the correct answer.

(1) How many digits will one ayut be?

a) three digits b) four digits c) five digits d) six digits

(2) Which one of the following is the largest number?

a) 7829 b) 7892 c) 7982 d) 7928

(3) ○○○○○○○○○○○○○●○○○○

If we count from the left in the figure above, what will be the position of of the colored circle in ordinal numbers?

a) fourth b) fifth c) fourteenth d) fifteenth

(4) If the numbers 2597, 2579, 2757 and 2775 are arranged in the descending order, which one of the following order is correct?

a) 2775 >2757>2597>2579 b) 2775 >2757>2579>2597

c) 2775 >2797>2597>2579 d) 2757 >2775>2597>2579

(5) The rule of the pattern 5, 10, 15, 20, 25, 30, ... is-

a) increase of 5 in each case b) increase of 10 in each case

c) decrease of 5 in each case d) decrease of 10 in each case

(6) 7, 11, ..., 19, ... 27. What are the numbers of blank spaces in the pattern?

a) 12, 20 b) 18, 26 c) 15, 23 d) 15, 20

5 Let us fill in the blanks.

(1) ☐ is the number of 3 thousands, 5 hundreds, 0 tens and 5 ones

(2) The number ☐ is 7 thousands, 1 hundreds, 4 tens and 5 ones

(3) The number ☐ is 2 thousands, 2 tens and 7 ones.

(4) The number ☐ is 5 thousands and 6 ones

(5) The number 4375 is ☐ thousands, ☐ hundreds, ☐ tens and ☐ ones

(6) The number 540009 is ☐ Ayuts, ☐ thousands and ☐ hundreds ☐ tens ☐ ones

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6 Let us answer the following questions

(1) What is the number 39 hundreds?

(2) What is the number 122 hundreds?

(3) How many hundreds are there in 2900?

(4) How many hundreds are there in 91000?

(5) In the case of addition, from which place value will the calculation be started?

7 Let us write the number in the blanks.

(1)

0   100   ☐   300   ☐   ☐   600

(2)

2300   ☐   2500   2600   2700   ☐   ☐

8 What is the number?

(1) A number greater than 12999 by 1

(2) A number less than 30000 by 1

(3) A number 10 less than 10000

(4) A number 10 more than 49990

(5) A number is 100 more than 79900

9 Let us compare smaller or larger using > or < symbol in the blank space

(1) 975 ☐ 957   (2) 8475 ☐ 8574

(3) 17779 ☐ 17879   (4) 37589 ☐ 38579

(5) 8579 ☐ 8578   (6) 17999 ☐ 18999

Addition

A packet of powdered milk costs taka 453 and a case of eggs costs taka 325. How much money is needed to buy a packet of powdered milk and a case of eggs?

453 taka

325 taka

This calculation is easy. We need to add. We can add using place value. 453 + 325 = ________

	h	t	o
	4	5	3
+	3	2	5

Adding digits of ones place 3 + 5 = 8

	h	t	o
	4	5	3
+	3	2	5
		7	8

Adding digits of tens place 5 + 2 = 7

	h	t	o
	4	5	3
+	3	2	5
	7	7	8

Adding digits of hundreds place 4 + 3 = 7

1 Let us add

(1) 333 + 44 = ☐ (2) 500 + 200 = ☐

(3) 234 + 155 = ☐ (4) 53 + 412 = ☐

(5) 510 + 245 = ☐ (6) 250 + 22 = ☐

(7)
```
    1 6
+ 3 5 2
```

(8)
```
  2 5 3
+ 5 2 4
```

(9)
```
  4 1 5
+ 2 3 0
```

2025

231, 425 and 342 mangoes were plucked respectively from 3 mango trees of Mina's orchard. How many mangoes were plucked from that orchard?

We can solve in the following way.

2	3	1
4	2	5
3	4	2

⇒

2	3	1
4	2	5
3	4	2
		4

$1+5+2=4$

⇒

2	3	1
4	2	5
3	4	2
	9	4

$3+2+4=9$

⇒

2	3	1
4	2	5
3	4	2
9	9	4

$2+4+3=9$

1 Let us add

(1) $200 + 300 + 400 =$ ☐ (2) $321 + 123 + 222 =$ ☐

(3) $147 + 401 + 251 =$ ☐ (4) $222 + 111 + 555 =$ ☐

(5)
$$\begin{array}{r} 352 \\ 234 \\ +\ 311 \\ \hline \end{array}$$

(6)
$$\begin{array}{r} 610 \\ 173 \\ +\ 116 \\ \hline \end{array}$$

(7)
$$\begin{array}{r} 532 \\ 55 \\ +\ 401 \\ \hline \end{array}$$

1 Let us add four digit numbers

$2133 + 2113 + 5343 =$ ☐

We can add four digit numbers just like three digit numbers

$$\begin{array}{r} 2\ 1\ 3\ 3 \\ 2\ 1\ 3\ 3 \\ +\ 2\ 1\ 3\ 3 \\ \hline 9\ 5\ 8\ 9 \end{array}$$

ones place: $3 + 3 + 3 = 9$

tens place: $3 + 1 + 4 = 8$

hundreds place: $1 + 1 + 3 = 5$

thousands place: $2 + 2 + 5 = 9$

2025

2 Let us add

(1) 105 + 230 + 33 = ☐ (2) 3333 + 4444 + 2222 = ☐

(3) 243 + 410 + 202 = ☐ (4) 3412 + 2131 + 4243 = ☐

3 Let us add

(1) 2312 + 3 + 240 + 23 = ☐

(2) 2340 + 3003 + 2102 + 241 = ☐

(3) 2222 + 1111 + 4321 + 1234 = ☐

(4) 4133 + 2301 + 1425 + 2140 = ☐

(5)
```
  1032
  4130
  3615
+ 1211
```

(6)
```
  2502
  3163
  2211
+ 1011
```

(7)
```
  3041
   403
  4255
+ 1300
```

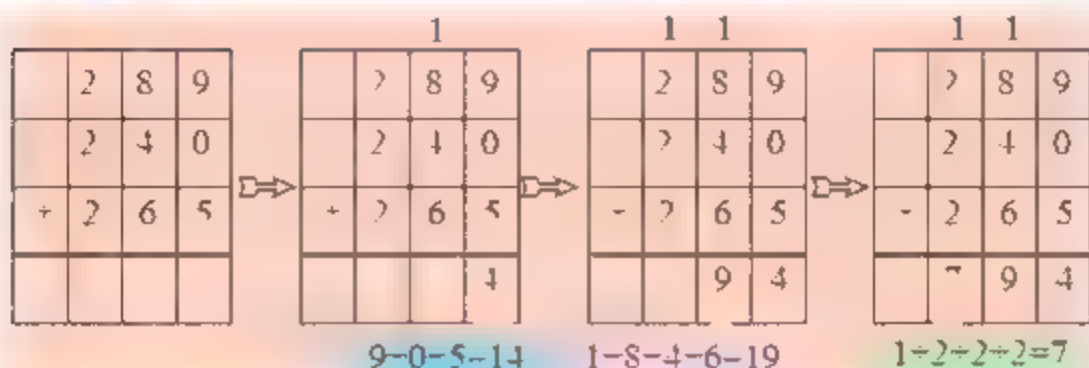
(8)
```
  3054
   432
+ 4310
```

(9)
```
  4131
  3422
+ 1044
```

(10)
```
  4030
  1415
+ 2351
```

2 Let us play with friends using number cards.

Let us make number cards of one, ten, hundred and thousand with paper. Pick any four from those cards to create a four-digit number. Add the obtained number with the number which is picked by your friend

In a test cricket match Bangladesh scored 289 runs on the 1st day, 240 runs on the 2nd day and 265 runs on the 3rd day. How many runs were scored in 3 days?

1 Let us add

(1) 228 + 356 = □ (2) 345 + 474 = □

(3) 467 + 245 = □ (4) 683 + 328 = □

(5)
```
  4 3 6
+ 3 7 8
```

(6)
```
  5 1 9
+ 2 8 4
```

(7)
```
  6 3 5
+ 3 7 9
```

2 Let us find the digit in blank spaces

(1) □10 + 2□5 + 10□ = 857

(2) 3□12 + □131 + 42□6 = 978□

(3)
```
  4 1 □ 0
    □ 3 4
  □ 0 4 5
  -------
  6 3 9 □
```

(4)
```
  3 0 □ 0
  □ 6 2 7
  4 □ 0 1
  -------
  8 8 6 □
```

1. Let us calculate, 3876 + 5508

3. Let us add vertically

(1) 2133 + 5423

(2) 6382 + 1676

(3) 5913 + 68

(4) 2876 + 5823

(5) 8097 + 1786

(6) 9584 + 469

4. Let us add side by side

(1) 240 + 2312 (2) 2537 + 1824 (3) 3628 + 4591

(4) 327 + 896 (5) 687 + 2365 (6) 7 + 2453

5 Let us calculate, 4837 + 2572 + 1896

7 + 2 + 6 = 15   1 + 3 + 7 + 9 = 20   2 + 8 + 5 + 8 = 23   2 + 4 + 2 + 1 = 9

6 Let us add

(1) 3412 + 2131 + 4243   (2) 1521 + 4839 + 2817

(3) 3418 + 1673 + 3628   (4) 718 + 421 + 594

(5) 168 + 1695 + 2453   (6) 1485 + 327 + 45

7 Let us add

(1)
$$\begin{array}{r} 3041 \\ 403 \\ 4255 \\ +\ 1300 \\ \hline \end{array}$$

(2)
$$\begin{array}{r} 2503 \\ 615 \\ 8101 \\ +\ 1120 \\ \hline \end{array}$$

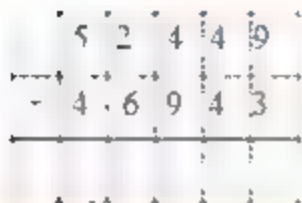
(3) 2150 + 3518 + 1310 + 1413   (4) 2461 + 389 + 3908 + 88

8 A zoo had 2754 visitors yesterday and 3656 visitors today. How many visitors came to the zoo in two days?

9 A wholesale shop has 4416 sacks of rice, 3241 sacks of wheat, and 1537 sacks of sugar. How many sacks are there in that shop?

There are 52889 Shal trees and 46943 mahogany trees in a forest. How many trees are there in the forest?

Mathematical sentence 52889 + 46943 =

Let us explain the calculation to a friend

Although the numbers are large, we can do this addition in the same way as the addition of small numbers

Total number of trees is 99832

1 Let us add

(1) 43121 + 14457 (2) 32675 + 1398 (3) 39650 + 16398

(4) 28438 + 17653 (5) 43756 + 37275 (6) 23836 + 45618

(7) 57122 + 22679 (8) 99999 + 1

2 Let us add

(1) 14275 + 23532 + 37126 (2) 40305 + 5246 + 30837

(3) 12547 + 20834 + 31276 + 18420 (4) 31983 + 643 + 4210 + 24581

3 A shop sold chocolates worth Tk 34295, biscuits Tk 13720 and Chanachur Tk 14853 in the month of January. How much in total is sold in that shop?

4 The adjacent chart shows the sales amount of a chocolate shop. What is the total sale of chocolates from January to April?

January	12376 taka
February	15753 taka
March	21654 taka
April	28765 taka

2025

5 Let us put number as we like in the blank boxes and create a story

Challenge

6 Let us add some five digit numbers as we like which will have the sum total of 100000.

[Step 1] taking two numbers

How will I do it? It seems difficult

Let us start from ones place. With the carrying digit make ten as a sum total in each box.

One is done for you.

		1	1	1	
	3	9	9	8	0
+	6	0	0	2	0
1	0	0	0	0	0

7 Let us play in pairs with number cards

Cards are taken from six cards with four digit numbers by lottery.
The three numbers on the cards are written in notebook and added.
Whoever has the highest sum will be the winner.

2025

Let us do

1 Let us tick (√) the correct answer.

(1) 2000+30000+4000 = What?

a) 3600 b) 9000 c) 36000 d) 90000

2) 20300 + 50090+907 = 712□7; Which one of the following will be the correct digit in the blank box?

a) 0 b) 3 c) 7 d) 9

3) Which one of the following sum will be equal to 90000?

a) 45000 + 35000 + 5000 b) 10000 + 60000 + 2000

c) 75000 + 10000 +5000 d) 55000 + 15000 +2000

4) $\begin{array}{r} 379 \\ +\ 9\square 5 \\ \hline 1344 \end{array}$, Which one of the following digit will be in the blank box?

a) 8 b) 7 c) 6 d) 5

5) Ruhi bought a story book for Tk. 1050, two dictionaries for Tk 1200 and a bag for Tk. 900 from the book fair. How much money did she spend?

a) Tk. 2150 b) Tk. 3150 c) Tk. 11250 d) Tk. 2115

6) Sumi has 668 taka If her father gives her Tk. 715 more, how much money will she have?

a) Tk.1373 b) Tk. 1383 c) Tk. 3813 d) Tk. 13713

2 Let us match the sums by drawing lines

a) 5009 + 3021	25840
b) 4001 + 60 + 400	8030
c) 25094 + 746	1210
d) 99 + 111 + 1000	10332
e) 2222 + 333 + 7777	4461

2025

3 Let us add.

(1) 1504 + 6282 (2) 7627 + 1438 (3) 2539 + 672

(4) 99 + 4322 (5) 8537 + 4265 (6) 43121 + 14457

(7) 16384 + 10623 (8) 63994 + 51 (9) 111 + 99889

4 Let us add.

(1) 2531 + 4012 + 1254 (2) 7621 + 547 + 1014

(3) 5200 + 1920 + 2780 (4) 6171 + 3530 + 2048

(5) 62310 + 15607 + 23491 (6) 44217 + 5382 + 891

(7) 3007 + 172 + 2712 + 1071 (8) 2900 + 1600 + 300 + 2400

5 Lusai Chakma earned a profit of Tk. 1680 in the first week, Tk. 890 in the second week and Tk. 1000 in the third week from his grocery shop. How much is his total profit in these three weeks?

Tk. 1680 in the first week
Tk. 890 in the second week
Tk. 1000 in the third week

Total profit Tk. ☐

6 Lima finished reading three books of 261 pages, 275 pages and 350 pages in a month. How many pages of story books has she read in the month?

7 Rajan runs 800 m, 1000 m and 400 m in the annual sports competition. How many meters does he run in total?

8 645, 729 and 890 mangoes were plucked respectively from 3 mango trees in Rina's orchard. How many mangoes were plucked from her orchard?

9 A nursery has 725 rose, 840 china rose and 945 marigold seedlings. How many seedlings are there in this nursery?

10 4536 women and 4879 men live in a village. How many people live in that village?

11 Lejon sold books for Tk. 1250 on the first day, Tk. 1460 on the second day, Tk. 1575 on the third day and Tk. 2000 on the fourth day. In four days how much did he earn selling books?

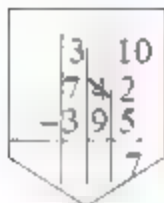
12 A warehouse has 8375 sacks of sugar, 11860 sacks of wheat and 12720 sacks of rice. How many sacks are there in the warehouse?

13 Make a story with the sentence 355 + 180 + 889 = ☐

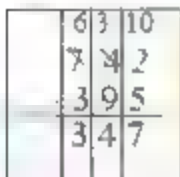
Subtraction

A nursery had 742 rose seedlings. From there Monir bought 395 seedlings for gardening. Now how many seedlings are left in the nursery?

Let's review how to subtract 3 digit numbers. Start with the ones place first and then subtract the next places gradually.

But be careful while handling numbers.

As with addition, calculation must be started from the ones place. We cannot subtract 5 from 2. So we borrow 10 (10 ones) from the tens place and subtract it. 12 − 5 = 7

We took 1 ten from 4 tens (4−1=3). Now we can't subtract 9 tens from 3 tens. So borrow from the hundreds place 1 hundred (=10 tens) to the tens place and subtract. 13 − 9 = 4

	6	3	10
	7	4	2
−	3	9	5
	3	4	7

We took 1 hundred from 7 hundred (7 − 1 = 6). Now subtract 3 hundred from 6 hundred. 6 − 3 = 3

1. Let us subtract

(1)
```
  4 8 7
− 1 6 3
```

(2)
```
  6 2 4
− 3 8 0
```

(3)
```
  4 3 5
−   9 8
```

(4) 769 − 49 (5) 541 − 216 (6) 742 − 209 (7) 252 − 72

(8) 331 − 146 (9) 850 − 787 (10) 403 − 179 (11) 500 − 66

8 8 6 4 → minuend
3 4 1 2 → subtrahend
5 3 5 2 → difference

ones place 4 − 2 = 2
tens place 6 − 1 = 5
hundreds place 7 − 4 = 3
thousands place 8 − 3 = 5

The number from which subtracted is the minuend and the number which is subtracted is the subtrahend

2 Reza has taka 5348 and Hiya has taka 3685. How much more money has Reza than Hiya?

Mathematical sentence 5348 − 3685 = ☐

$$\begin{array}{r} 5348 \\ -\ 3685 \\ \hline \end{array}$$

2 Subtraction

(1) $\begin{array}{r} 2574 \\ -\,1523 \\ \hline \end{array}$ (2) $\begin{array}{r} 8234 \\ -\,3618 \\ \hline \end{array}$ (3) $\begin{array}{r} 1482 \\ -\,947 \\ \hline \end{array}$

(4) 7804 − 672 (5) 6389 − 2395 (6) 3836 − 1947

(7) 4548 − 3869 (8) 1138 − 596 (9) 2536 − 2457

3 Out of 1000 litchis of a litchi seller, 26 litchis got rotten. How many litchis can he sell?

Mathematical sentence: 1000 − 26 = ☐

We cannot subtract 6 from 0 in the ones place. So I want to borrow 10. But where do I get 10?

We did this type of subtraction in grade 2. So let's bring 1 thousand (10 hundreds) from hundreds place to tens place. Next, bring 1 hundred (10 tens) to the tens place and 1 ten (10 ones) to the ones place. In this way we can do the subtraction.

2025

3 Let us subtract

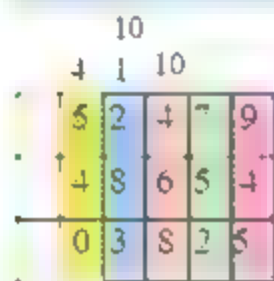
(1) 1 0 0 0 − 4 5 8   (2) 4 0 0 3 − 1 0 0 9

(3) 1000   991   (4) 1002   777   (5) 1001   48

(6) 5000   263   (7) 6004   8   (8) 7000   2036

4 Yesterday 48654 people came to a fair and 52479 people came to the fair today. What is the difference in the number of people on these two days?

Mathematical sentence: 52479   48654 ☐

Explain to a friend how to calculate

Although the numbers are large we can do this subtraction in the same way as subtracting small numbers

4 Let us subtract

(1) 76893 − 42731   (2) 58485 − 3071   (3) 69143 − 24197

(4) 13316 − 5981   (5) 42816 − 12937   (6) 34526 − 34352

(7) 10000 − 2468   (8) 40000 − 987   (9) 80002 − 70036

5 The population in a village is 12638 people. The number of male is 6155. How many female are there in this village?

5 Let us subtract side by side   74853   35427

As with addition, we can subtract digits from the ones place to the larger places, putting a   sign over the digit on which calculation is done. Also be careful about borrowing.

6 10 4 10

7 4 8 5 3   3 5 4 2 7   3 9 4 2 6

6 Let us subtract

(1) 75000   42000   (2) 48670   45550   (3) 65200   42500

(4) 74391   52810   (5) 92314   57858   (6) 100000   11111

Let us do

1 Let us tick (√) the correct answer.

(1) What do you call the number from which another number is subtracted?

a) Subtrahend b) Minuend c) Difference d) Subtraction

(2) Annabia has Tk.1500, Liya has Tk.950. What will you do to find out how much more money Annabia has than Liya?

a) Addition b) Subtraction c) Multiplication d) Division

(3) Rani has Tk. 1200, Sangita has Tk. 600. To find out the difference of their money, which of the following is correct?

a) $1200 + 600$ b) $1200 - 600$ c) 1200×600 d) $1200 \div 600$

(4) $1020 - 111 = \square$? What will be the number in the blank box?

a) 109 b) 909 c) 919 d) 949

(5) Riaz has bought a hilsa fish for Tk. 1850 and paid Tk.2000 to the fish seller. How much money will the seller give him back?

a) Tk.150 b) Tk.250 c) Tk.1150 d) Tk.1250

2 Let us answer in short.

a) While subtraction, from which place value do you start calculation?

b) What is a subtrahend?

c) If 101 is subtracted from 1000, what will be left?

3 Let us subtract.

(1) 4624 2230 (2) 7682 3958 (3) 6315 4329

(4) 1395 851 (5) 3213 2426 (6) 1000 356

(7) 59457 36021 (8) 43520 22619 (9) 14283 7648

(10) 43625 876 (11) 83153 33216 (12) 50000 38427

4 Mr Hasan sold books worth 5620 taka on the first day and worth 6385 taka on the second day at the book fair. How much more did he sell on the second day?

5 Nazma Begum went to the market with 1560 taka. She spent 975 taka. How much money is she left with?

6 The monthly income of Mr Rahim is 18550 taka and monthly expenditure 17984 taka. How much is Mr Rahim's monthly deposit?

7 Lima has 3470 taka and Rahul has 2645 taka. How much more money does Lima have?

8 Bijay bought a bicycle for taka 35465 and a TV for taka 45722. How much more money did he spend on the TV?

9 There are 2165 passengers in a train. 796 passengers got off at one station. How many passengers are on the train now?

10 Abid's mother had Tk 20500. Abid went to the market with 3685 taka. How much money is left with Abid's mother?

11 Nasima Begum earns taka 100000 and spends taka 88755 per year. How much money does she save in a year?

12 Let us make a story with the math sentence 1250 – 960 = ☐

2025

Relation between addition and subtraction

Is there any relationship between addition and subtraction?

We learned it in grade two. Can you remember? Let's solve the following problem.

We had some apples. After selling 6 of them we now have 8 apples. How many apples did we have at first?

I can recall it. Let's calculate $\square - 6 = 8$. If 6 is subtracted from which number, 8 remains?

Subtraction and addition are reverse operations as shown below:

$14 - 6 = 8$, $8 + 6 = 14$ and

$14 - 8 = 6$, $14 - 6 = 8$

14 → minuend

6 → subtrahend

8 → difference

minuend – subtrahend = difference

difference – subtrahend minuend

minuend difference subtrahend

There is a particular relation among minuend, subtrahend and difference.

1 Let us fill in the blank box.

(1) 42 9 $\square$ (2) 55 $\square$ 30 (3) $\square$ 32 54

(4) 33 + $\square$ 42 (5) 30 + 25 $\square$ (6) 86 54 $\square$

(7) $\square$ 33 9 (8) $\square$ 30 25 (9) 54 + 32 $\square$

1. There are 1637 passengers in a train. At a station 865 passengers got down and 730 new passengers got into the train. How many passengers are there in the train now?

"passengers got down" will be subtracted and "passengers got into" will be added. How can we calculate?

Arithmetic sentence : 1637 − 865 − 730 = ☐

$$\begin{array}{r} 1637 \\ -\ 865 \\ \hline \boxed{772} \end{array} \quad \Rightarrow \quad \begin{array}{r} \boxed{772} \\ +730 \\ \hline \boxed{1502} \end{array}$$

Now there are 1502 passengers in the train.

2. There were of 538 students in a school. 125 new students got admitted in that school and 93 students moved to other schools. How many students are there in the school now?

Here "new students admitted" will be added and "students moved to another school" will be subtracted.

Total students 538
New students admitted + 125
☐
Students moved − 93
Students remained ☐

There are ☐ students in the school.

2025

2 Let us fill in the blanks

Reza had 65 marbles His father gave him more 48 marbles Now Reza has [ ] marbles.

While playing with his friends, Reza lost 17 marbles. He has [ ] marbles now.

3 Create two problems by writing the suitable numbers in the blanks (one is shown).

1 (a) Limu had 14 pens Her mother gave her more 10 pens How many pens does Limu have in total?

(b) Raju had 29 balloons He gave 5 balloons to his sister Now how many balloons are left with him?

2 (a)

(b)

3 (a)

(b)

4 (a)

(b)

Let us do

1 Let us tick (√) the correct answer.

(1) 30 + [ ] = 75, which number will you put in the blank?
(a) 30 (b) 45 (c) 75 (d) 105

(2) Which one of the following is not correct?
(a) minuend subtrahend difference
(b) difference + subtrahend minuend
(c) minuend + difference = subtrahend
(d) minuend difference subtrahend

(3) 38291+16270= 545 1, what digit will be in the blank box?
(a) 9 (b) 8 (c) 7 (d) 6

2 Let us calculate up and down

(1) 194 +704

(2) 7429 +1639

(3) 5893 + 284

(4) 6171 1530 +2048

(5) 3471 1792 2054 +1907

(6) 63829 10245 +26391

(7) 81111 −18889

(5) 14537 32521 12512 +23524

(9) 472 −161

(10) 7309 − 548

(11) 8902 −4529

(12) 6249 − 630

(13) 73650 − 7692

(14) 54870 − 25481

(15) 100000 − 9

(16) 82326 − 58889

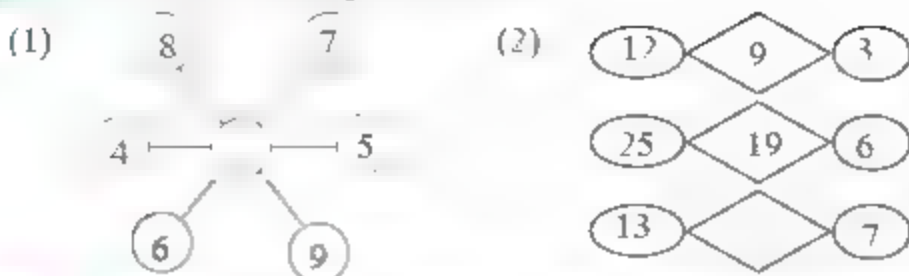
3 Let us calculate side by side

(1) 5372 + 167 + 2683 = [ ]
(2) 38291 − 16270 + 10000 = [ ]
(3) 6489 3281 [ ]
(4) 89420 53280 [ ]

4 Let us fill in the blanks

(1) 98 + [ ] + 3607 + 2659 = 7453
(2) 26874 + [ ] = 59300
(3) 3004 − [ ] = 2655
(4) [ ] − 6483 3517

2025

5 Let us look for missing numbers

6 Siam went to the market with taka 1800. He bought rice for taka 720, fish for taka 585 and vegetables for taka 425 . How much money is left with him?

7 In a nursery there were 950 saplings. From this 532 saplings were sold and 820 new saplings were brought. How many saplings are there in the nursery now?

8 Ruma has taka 945 . Asha has taka 215 less than Ruma. Their money put together equals Maina's money. How much money does Maina have?

9 The sum of three numbers is 89243. If two of them are 24576 and 32084, then what is the third number?

10 The son is 15 years old and the mother is 48 years. What will be their age in total after 5 years?

11 Seeta has taka 890 more than Geeta. Gita has taka 520 less than Abir has. Abir has taka 965. How much money do Geeta and Seeta have?

12 Rajeev's mother had taka 5580. Before going to market, she took taka 3420 more from Rajeev's father. She spent taka 7830 on shopping. How much money is left with her now?

13 Taka 12000 is required for annual sports competition. Taka 5500 as government grant and taka 3700 were given from the school fund. How much more money is needed for organizing the competition?

14 Ratan bought a motorcycle for taka 85000. He spent taka 2500 for registration of motor cycle and taka 1200 on repairs. If he sells the motorcycle for taka 98000 now, how much money profit will he make?

Multiplication

Let us recall the multiplication table up to 10 times and fill the blanks.

multiplier

multiplicand

	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18		24	27	30
4	4		12	16	20	24	28	32		40
5	5	10	15	20	25		35	40	45	50
6	6	12	18	24		36	42	48	55	60
7	7	14		28	35	42	49	56	63	70
8	8	16	24	32	40		56	64	72	80
9	9	18	27	36	45	54	63	72		90
10	10	20	30	40	50	60	70		90	100

In case of multiplication, the first number is multiplicand, and the second number is multiplier.

In the first blank I got 21 by multiplication of 3 and 7

Here 3 is multiplicand and 7 is multiplier

(1) Let us think about how to find the answer to 6 × 5

	1	2	3	4	5	6	7	8	9	10
6	6	12	18	24		36	42	48	54	60

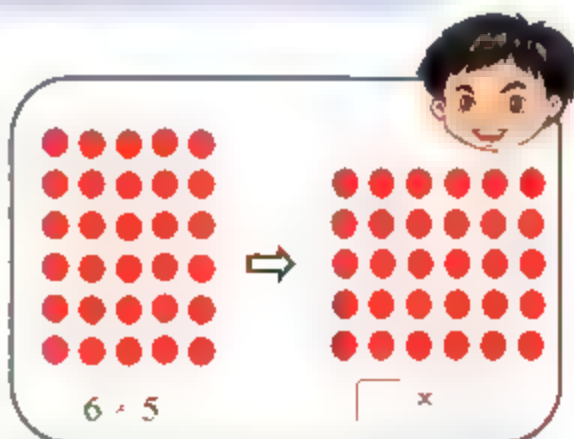
increases by ☐ decreases by ☐

$6 \times 5 = 6 \times 4 + \square$ $6 \times 5 = 6 \times 6 - \square$

The answer of 6 × 5 is ☐ more than that of 6 × 4

The answer of 6 × 5 is ☐ less than that of 6 × 6

If the multiplier increases by 1, the product increases by multiplicand. Again, if the multiplier decreases by 1, the product decreases by multiplicand.

(2) Rafi has found the product of 6 × 5 by doing another multiplication with the same product as shown in the diagram.
Let's think about his calculation.

In case of multiplication, the product remains the same even if the multiplicand and the multiplier interchange their places.

2025

1 **Let us fill in the blanks**

(1) The answer of 4×6 is ☐ more than that of 4×5

(2) The answer of 7×8 is ☐ less than that of 7×9

(3) $5 \times 4 = 5 \times 3 +$ ☐

(4) $8 \times 9 = 8 \times 10 -$ ☐

2 Let us split the multiplier or multiplicand into two numbers and calculate 8×6

Let us calculate by splitting the multiplicand.

Let us calculate by splitting the multiplier

8×6 — $8 \times$ ☐ $=$ ☐

$8 \times$ ☐ $=$ ☐

Total ☐

If the multiplicand or the multiplier is split into two numbers, the product remains the same

2 Let us fill in the blanks.

(1) $9 \times 5 = 5 \times 5 +$ ☐ $\times 5$ (2) $7 \times 4 = 7 \times$ ☐ $+ 7 \times 2$

2025

Let us think about how to calculate 13×5

I have added 5 times of 13 .

$13 + 13 + 13 + 13 + 13 =$

To do this calculation let's use the rules of multiplication

$13 \times 5 = 5 \times 13$ Then

$5 \times 9 = 45$ Increase by 5

$5 \times 10 = 50$

$5 \times 11 = \square$ $\square$ Increases by

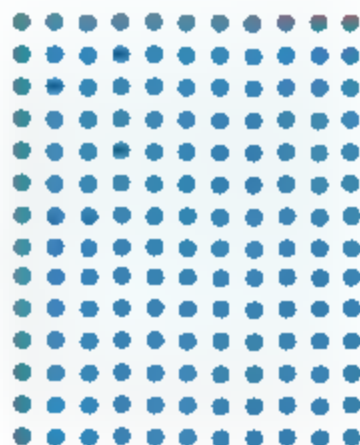
$5 \times 12 = \square$ $\square$ Increases by

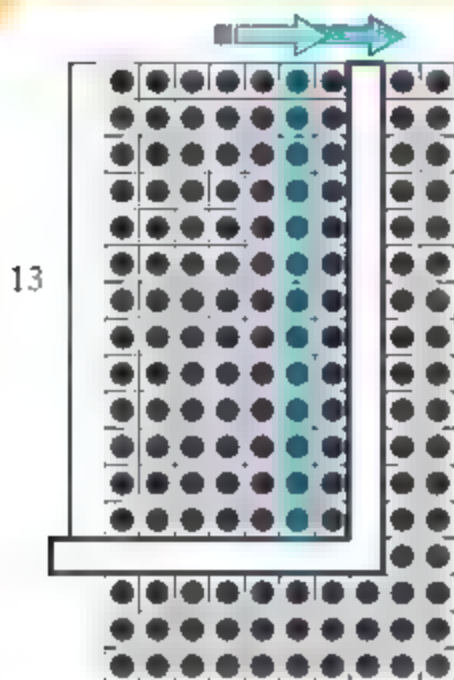
$5 \times 13 = \square$ $\square$ Increases by

I have splitted 13 in two numbers

$13 \times 5 =$ $10 \times 5 = \square$

$\square \times 5 = \square$

Total $\square$

1 Let us calculate 14×11 using rules for multiplication.

Let us make the multiplication table of 13

Multiplication table of 13

13 × 1 = 13

13 × 2 = 26

13 × 3 = ☐

13 × 4 = ☐

13 × 5 = ☐

13 × 6 = ☐

13 × 7 = ☐

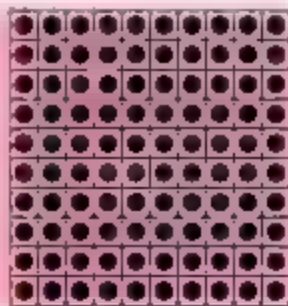
13 × 8 = ☐

13 × 9 = ☐

13 × 10 = ☐

1. Multiply from the following picture and write in the box.

☐

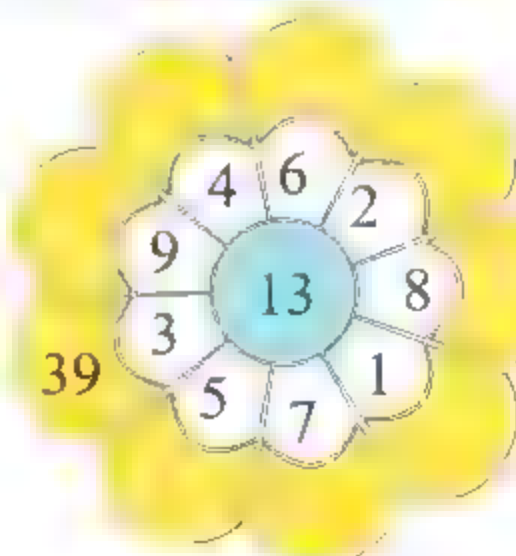
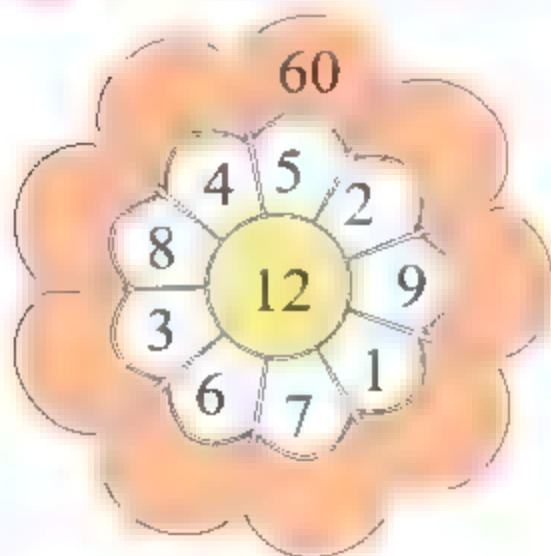
10 times

3 times

1 Tahsin wants to buy 13 tops If the price of each top is taka 8. how much does he need to pay?

2 Let's match by drawing lines.(One is done)

14 × 1	56
14 × 2	140
14 × 3	28
14 × 4	112
14 × 5	84
14 × 6	98
14 × 7	14
14 × 8	126
14 × 9	70
14 × 10	42

2 Let us multiply and fill in the blanks in the pictures below.

2025

Let us complete the table below by multiplying up to 15

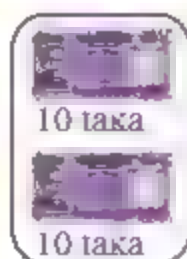
Let s calculate as we did to find 13×5 or 14×11 Then write the product in the multiplication table

multiplier

multiplicand

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1	2	3	4	5	6	7	8	9	10					
2	2	4	6	8	10	12	14	16	19	20					
3	3	6	9	12	15	18	21	24	27	30					
4	4	8	12	16	20	24	28	32	36	40					
5	5	10	15	20	25	30	35	40	45	50					
6	6	12	18	24	30	36	42	48	54	60					
7	7	14	21	28	35	42	49	56	63	70					
8	8	16	24	32	40	48	56	64	72	80					
9	9	18	27	36	45	54	63	72	81	90					
10	10	20	30	40	50	60	70	80	90	100					
11															
12															
13															
14															
15															

2025

A pineapple costs 20 taka. If you buy 4, how much will it cost?

Mathematical sentence: $20 \times 4 = \square$

$2 \times 4 = 8$

10 times ↓ ↓ 10 times

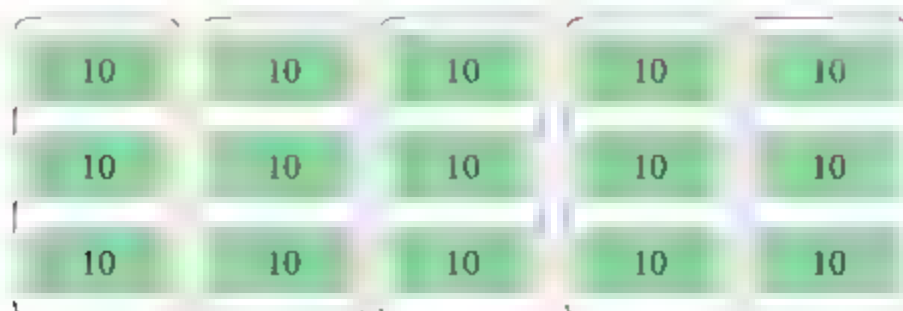
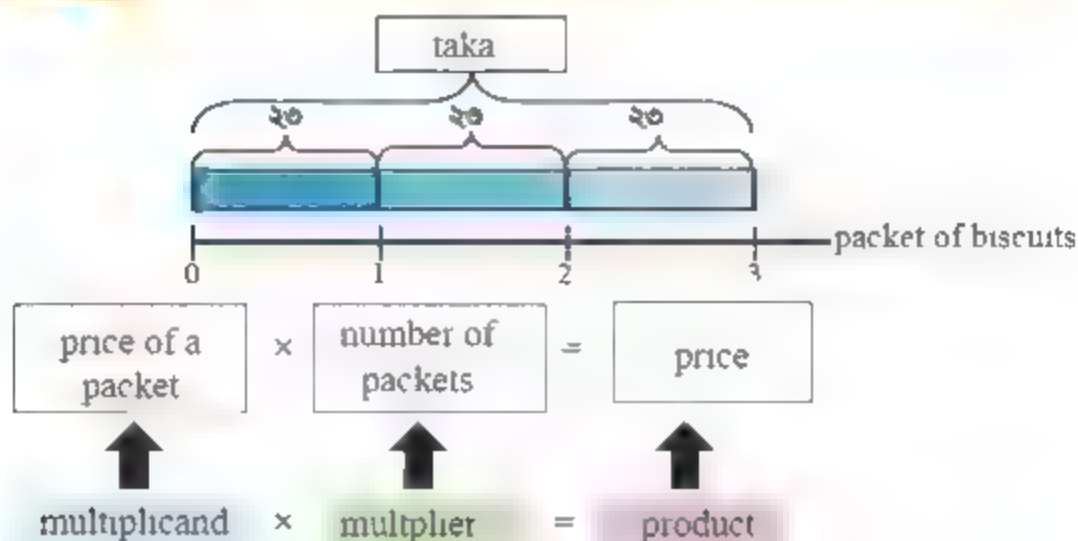
$20 \times 4 = \square$

There are 2 tens in the number 20. The answer is 8 tens. So, it will cost taka 80 for 4 pineapples.

1 How is 30×5 to be calculated?

1 Let us multiply

(1) 20×3 (2) 40×2 (3) 30×4 (4) 50×6

2023

Reza wants to buy three packets of biscuits. The price of one packet is 23 taka. How much does he need to pay for it?

Let us write the mathematical sentence.

Now, let's think about how to calculate using the table below.

tens		ones		
10	10	1	1	1
10	10	1	1	1
10	10	1	1	1

← 23×3

20×3 3×3

23×3 = 69

23×3

$20 \times 3 = 60$

$3 \times 3 = 9$

Total 69

taka

1 Let us think about how to multiply 23 × 3 up and down.

$$\begin{array}{rl} 23 & \\ \times\ \ 3 & \\ \hline 9 & \quad 3 \times 3 \\ +\ 60 & \quad 20 \times 3 \\ \hline 69 & \end{array}$$

1 Let us multiply vertically

(1) $\begin{array}{r} 12 \\ \times\ \ 4 \\ \hline \end{array}$ (2) $\begin{array}{r} 21 \\ \times\ \ 4 \\ \hline \end{array}$ (3) $\begin{array}{r} 32 \\ \times\ \ 3 \\ \hline \end{array}$

(4) $\begin{array}{r} 22 \\ \times\ \ 2 \\ \hline \end{array}$ (5) $\begin{array}{r} 30 \\ \times\ \ 2 \\ \hline \end{array}$ (6) $\begin{array}{r} 20 \\ \times\ \ 3 \\ \hline \end{array}$

2 Let us multiply.

(1) 34 × 2 (2) 24 × 2 (3) 30 × 3 (4) 20 × 4

2025

Let us think about how to multiply 17 × 3

We can divide 17 into two parts 10 and 7

10 × 3 = ☐

7 × 3 = ☐

17 × 3 = ☐

1 Let us think about how to multiply 17 × 3 vertically

Let us multiply 7 × 3 = 21 and write 1 in the place of ones and 2 in the place of tens as in the left figure

Let us multiply 1 × 3=3 and add 2 (3+2= 5) then write 5 in the place of tens

$$\begin{array}{rl} 17 & \\ \times\ 3 & \\ \hline 21 & \ldots\ 7 \times 3 \\ +\ 30 & \ldots\ 10 \times 3 \\ \hline 51 & \end{array}$$

1 Let us multiply vertically

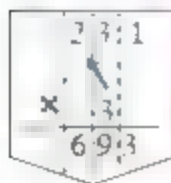
(1) $\begin{array}{r} 24 \\ \times\ 4 \\ \hline \end{array}$ (2) $\begin{array}{r} 12 \\ \times\ 8 \\ \hline \end{array}$ (2) $\begin{array}{r} 48 \\ \times\ 2 \\ \hline \end{array}$

2 Let us multiply sideways

(1) 18 × 5 (2) 26 × 3 (3) 39 × 2 (4) 25 × 4

Let us think about how to multiply 43 × 3 and 67 × 3.

(1) 43 × 3

Let us multiply 3 × 3 = 9 and write 9 in the ones place

Let us multiply 4 × 3 = 12 and write 2 in tens place and 1 in the place of hundreds

```
   4 3
 ×   3
     9 ...... 3 × 3
+ 1 2 0 ..... 40 × 3
  1 2 9
```

(2) 67 × 3

Let us write 1 in the place ones and 2 in the tens place

67
× 3
201

Let us multiply 6 × 3 = 18
Add 2 (18 + 2 = 20)
Write 0 in the tens place and 2 in the hundreds place

```
    6 7
  ×   3
    2 1 ...... 7 × 3
+ 1 8 0 ..... 60 × 3
  2 0 1
```

1 Let us multiply sideways

(1) 62 × 4 (2) 41 × 5 (3) 72 × 3 (4) 37 × 5

(5) 32 × 8 (6) 68 × 4 (7) 79 × 2 (8) 95 × 6

Let us think about how to multiply 231 × 3

hundreds	tens	ones
100 100	10 10 10	1
100 100	10 10 10	1
100 100	10 10 10	1

→ 231 × 3

200 × 3   30 × 3   1 × 3

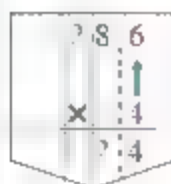
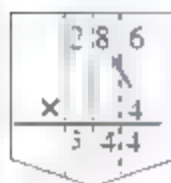
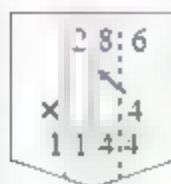
$$231 \times 3 \begin{cases} 200 \times 3 = 600 \\ 30 \times 3 = 90 \\ 1 \times 3 = 3 \end{cases}$$

total 693

1 Let us multiply sideways.

(1) 121 × 4   (2) 314 × 2   (3) 232 × 3   (4) 423 × 2

1 Let us think about how to multiply 286×4.

286×4 ☐

Let us multiply $6 \times 4 = 24$ and write 4 in the ones place and 2 (small size) in the tens place

Let us multiply $8 \times 4 = 32$ and add 2 $(32 + 2 = 34)$ and write 4 in the tens place and 3 (small size) in the hundreds place

Let us multiply $2 \times 4 = 8$ and add 3 $(8 + 3 = 11)$ and write 1 in the hundreds place and 1 in the thousands place

```
  2 8 6
×     4
    2 4 ......   6 × 4
  3 2 0 ......  80 × 4
  8 0 0 ...... 200 × 4
1 1 4 4
```

2 Let us multiply sideways.

(1) 162×3	(2) 273×2	(3) 153×5
(4) 249×4	(5) 912×3	(6) 651×4
(7) 276×7	(8) 475×8	(9) 604×8
(10) 207×5	(11) 820×7	(12) 380×6

2025

There are 30 benches in a classroom. 4 students can sit on each bench. How many students can sit on 30 benches?

mathematical sentence $4 \times 30 = \square$

Let us explain Mina's idea about how to calculate 4×30

The product remains same even though the multiplicand and the multiplier interchange their places. So, the product of 4×30 and 30×4 is the same

$4 \times 30 = \square$ students

The product of 4×30 is ten times of the product of 4×3.

	$4 \times 3 = 12$	
10 times ↓		↓ 10 times
	$40 \times 30 = 120$	

1 Let us calculate 20×40 as shown in the figure on the right side.

2×4	
↓ 10 times	↓ 10 times
20×4	
10 times ↓	↓ 10 times
20×40	

$2 \times 4 \quad 12$

1 Let us multiply

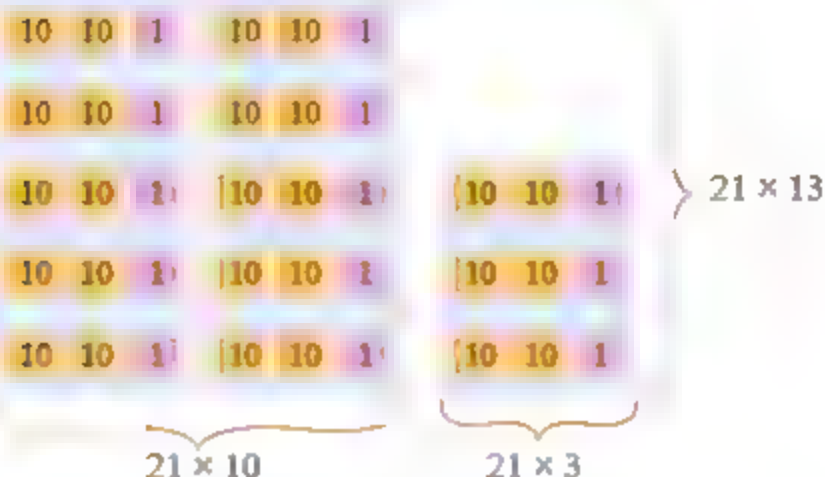
(1) 3×20 (2) 7×40 (3) 8×60 (4) 4×50

(5) 12×30 (6) 25×20 (7) 30×50 (8) 60×70

2025

Mina has bought 13 pencils. If each pencil costs taka 21, what will be the total price of all pencils?

Let's think about how we can calculate

10	10	1	10	10	1			
10	10	1	10	10	1			
10	10	1	10	10	1	10	10	1
10	10	1	10	10	1	10	10	1
10	10	1	10	10	1	10	10	1

21×10 $\quad$ 21×3 $\quad$ } 21×13

$$21 \times 13 \begin{cases} 21 \times 10 = 210 \\ 21 \times 3 = \ \ 63 \end{cases}$$

Total = 273

$21 \times 13 = 273$

Total price is taka 273

Let's express 21 and 13 in their place values.

21 = 20 + 1

13 = 10 + 3

	20	1
10	200	10
3	60	3

$$\begin{array}{r} 200 \\ 60 \\ 10 \\ + \ 3 \\ \hline 273 \end{array}$$

Total price is taka 273

2025

Let us now think about how to multiply vertically

Let us think about why 21 shifted like the figure on the left not starting from the ones place

1 Let us multiply

(1) $\begin{array}{r} 12 \\ \times\ 24 \\ \hline \end{array}$ (2) $\begin{array}{r} 63 \\ \times\ 16 \\ \hline \end{array}$ (3) $\begin{array}{r} 30 \\ \times\ 23 \\ \hline \end{array}$

2 Let us multiply sideways.

(1) 41×23 (2) 25×24 (3) 17×42 (4) 15×36

1 Let us explain how the following multiplications have been done

(1)
```
     4 3
   × 3 5
   2 1 5
 1 2 9 0
 1 5 0 5
```

(2)
```
     3 6
   × 5 3
   1 0 8
 1 8 0 0
 1 9 0 8
```

Here, to multiply a digit has been carried.

We have learnt multiplication with carrying

3 Let us multiply.

(1) 17×68 (2) 91×25 (3) 54×20

(4) 27×60 (5) 95×27 (6) 59×29

4 Let us multiply sideways.

(1) 35×57 (2) 81×49 (3) 25×64 (4) 48×96

(5) 12×30 (6) 38×20 (7) 87×50 (8) 70×80

2025

Let us think about how to multiply 367×25

$$\begin{array}{r} 367 \\ \times\ 25 \\ \hline 1835 \end{array}$$

367×5

$7 \times 5 = 35$. 5 is in the place of ones and the carried 3 is in the place of tens. $6 \times 5 = 30$ $(30 + 3 = 33)$. 3 is in the place of tens and carried 3 is in the place of hundreds. $3 \times 5 = 15$ $(15 + 3 = 18)$. 8 is in the place of hundreds and 1 is in the place of thousands.

$$\begin{array}{r} 367 \\ \times\ 25 \\ \hline 1835 \\ 7340 \end{array}$$

367×2

$7 \times 2 = 14$. 4 is in the place of tens and carried 1 is in the place of hundreds. $6 \times 2 = 12$ $(12 + 1 = 13)$. 3 is in the place of hundreds and 1 is in the place of thousands. $3 \times 2 = 6$ $(6 + 1 = 7)$. 7 is in the place of thousands.

$$\begin{array}{r} 367 \\ \times\ 25 \\ \hline 1835 \\ 7340 \\ \hline 9175 \end{array}$$

Let us add.

1 Let us multiply sideways.

(1) 213×23 (2) 163×47 (3) 264×27 (4) 314×26

(5) 367×32 (6) 685×83 (7) 517×43 (8) 528×79

(9) 404×42 (10) 203×54 (11) 309×85 (12) 708×26

2 Let us think about how to multiply 502×63

3 Tondra Chakma drives a car at 45 kilometers per hour. How many kilometers will she drive in 8 hours at the same speed?

Let us do

1 Let us tick (√) the correct answer

(1) Which one of the following is the product of 500 × 30?

(a) 150 (b) 1500 (c) 15000 (d) 150000

(2) What is the product of 172 × 50?

(a) 5500 (b) 8500 (c) 8600 (d) 17250

(3) Which one of the following is equal to 70 × 50?

(a) 7 × 5 (b) 7 × 50 (c) 70 × 5 (d) 70 × 50

2 Let us multiply.

(1) 15 × 5 = ☐ (2) 18 × 9 = ☐ (3) 53 × 8 = ☐

(4) 75 × 6 = ☐ (5) 21 × 31 = ☐ (6) 48 × 93 = ☐

(7) 121 × 31= ☐ (8) 495 × 14 = ☐ (9) 284 × 28 = ☐

(10) 269 × 35 = ☐

3 Let us multiply.

(1) 14 × 2	(2) 56 × 6	(3) 90 × 5
(4) 36 × 48	(5) 28 × 73	(6) 89 × 64
(7) 121 × 23	(8) 305 × 7	(9) 486 × 9
(10) 210 × 20	(11) 373 × 28	(12) 298 × 35

2025

4 1 hali consists of 4 pieces. How many will be in 5 hali?

5 If there are 6 flowers in a bunch, how many flowers will be in 8 such bunches?

6 Taskia reads books 4 hours daily. How many hours does she read books in a week?

7 There are 24 sheets of paper in a quire. How many sheets of paper are there in 12 quires?

8 100 paisa equals 1 taka. How much paisa will be in 10 taka?

9 There are 130 pages in a book. How many pages are there in such 28 books?

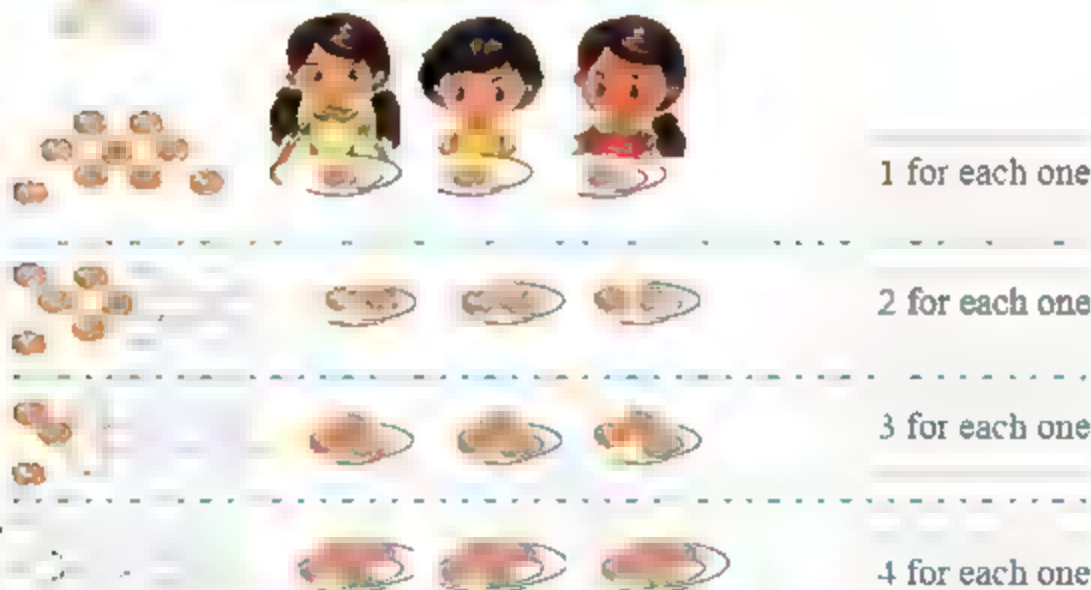
10 Mili has Tk. 225. Munni has 14 times more than Mili's. How much money does Munni have?

11 The price of one hilsa fish is Tk. 750. What is the price of such 20 hilsa fish?

Division

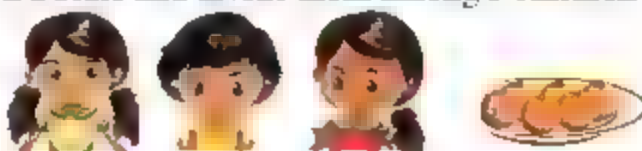
How many will each one get?

1 There are 12 biscuits. If these are equally divided among 3 children, how many biscuits will each get?

Let's think about how to calculate

Therefore everyone has got 4 biscuits

This type of calculation is called Division and the symbol, ÷ is the division mark.

2 Let us take some oranges on a plate and divide them among 3 children.

( ) ÷ 3 = ( )

I've taken 6 oranges and divided them among 3 children in this way

I've taken 3 oranges and divided them among 3 people in this way

( ) ÷ 3 = ( )

If there is no orange on the plate how many will each one get?

3 There are 18 chocolates. If these chocolates are equally divided among 6 children, how many will each one get?

Let's write it in the mathematical sentence and calculate.

Total number of chocolates	÷ number of children	= number of chocolates

Let us make similar questions using different number of things around us

[ ] chocolates

There are 20 bananas. If these are equally divided among 5 chil dren, how many will each one get?

Let's think and discuss how to get the answer using multiplication

[1] When we give 1 banana to each of 5 children, the number of bananas is-

$1 \times 5 = 5$

[2] When we give 2 banana to each of 5 children, the number of bananas is-

$2 \times 5 = 10$

[3] When we give 3 banana to each of 5 children, the number of bananas is-

$\square \times \square = \square$

[4] When we give 3 banana to each of 5 children, the number of bananas is-

$\square \times \square = \square$

We can use the multiplication table of 5 to evaluate $20 \div 5$.

$20 \div 5 = \square$ $\square \times 5 = 20$

Each of the children will get 4 bananas.

1 If 48 sheets of paper are divided equally among 8 children, how many sheets will each one get?

2 Father has taka 63. He wants to divide this money equally among 7 members in his family. How much will each one get?

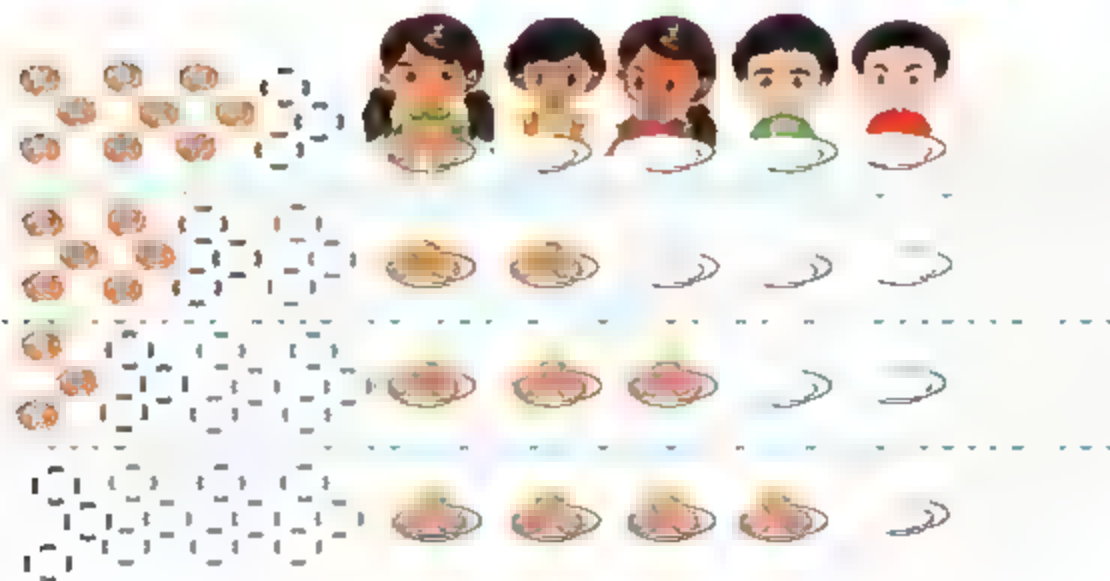
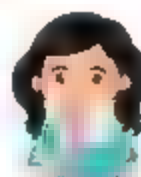
3 The price of 1 hali of eggs is Tk. 48. What is the price of an egg?

2025

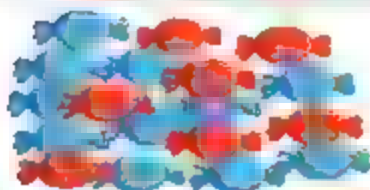
How many children can share?

1. There are 12 biscuits. If each child gets 3 biscuits, how many children can get the biscuits?

Let's think about how to calculate

2023-5

Let's give 3 biscuits to each of the children from 12 biscuits. We can divide the biscuits, 3 for 1, 2 × 3 = 6 for 2, 3 × 3 = 9 for 3, 4 × 3 = 12 for 4. In this way, 12 biscuits can be divided among 4 children giving 3 to each one.

Have you found any difference between this division and the previous division?

2 There are 18 chocolates. If we give 6 chocolates to each of the children, how many children will get the chocolates?

Let's write in a mathematical sentence and calculate

There are 20 bananas. If each child gets 5 bananas, how many children can get the bananas?

Let's think and discuss how to get the answer using multiplication.

[1] If 5 bananas are given to 1 child

$5 \times 1 = 5$

[2] If 5 bananas are given to each of 2 children

●●●●● ●●●●●

$5 \times 2 = 10$

[3] If 5 bananas are given to each of 3 children

●●●●● ●●●●● ●●●●●

$\square \times \square = \square$

[4] If 5 bananas are given to each of 4 children

●●●●● ●●●●● ●●●●● ●●●●●

$\square \times \square = \square$

To get the answer of 20÷5, we can use the multiplication table of 5.

$20 \div 5 = \square$ $\square \times 5 = 20$

4 children

1 We distributed 32 lichis among a few children. Each child got 8 lichis. How many children were given lichis?

Mathematical sentence $32 \div 8 = \square$

2 There are 45 notebooks for awarding the students of a school. If 5 notebooks are given to a student, how many students will get prizes?

2025

Calculation of Division

Let us divide 16 ÷ 2

We can calculate division by multiplication.

2 × ☐ = 16

2 × [8] = 16

16 ÷ 2 = 8

We can calculate division using the multiplication table of 2

2 × 1 = 2, 2 × 2 = 4
2 × 3 = 6 ...... 2 × 7 = 14
2 × 8 = 16, So the answer is 8

In case of division, like 16÷2, 16 is dividend, 2 is called divisor

16 ÷ 2 = ☐ 2 × ☐ = 16

dividend divisor quotient

1 Let us divide

(1) 3 ÷ 1 (2) 6 ÷ 1 (3) 12 ÷ 2 (4) 2 ÷ 2
(5) 18 ÷ 2 (6) 20 ÷ 2 (7) 9 ÷ 3 (8) 12 ÷ 3
(9) 6 ÷ 3 (10) 3 ÷ 3 (11) 21 ÷ 3 (12) 27 ÷ 3

2 Let us divide

(1) 16 ÷ 4 (2) 20 ÷ 4 (3) 40 ÷ 4 (4) 32 ÷ 4
(5) 15 ÷ 5 (6) 30 ÷ 5 (7) 45 ÷ 5 (8) 10 ÷ 5
(9) 18 ÷ 6 (10) 6 ÷ 6 (11) 42 ÷ 6 (12) 54 ÷ 6

3 Let us divide

(1) 42 ÷ 7 (2) 70 ÷ 7 (3) 28 ÷ 7 (4) 14 ÷ 7
(5) 72 ÷ 8 (6) 32 ÷ 8 (7) 16 ÷ 8 (8) 40 ÷ 8
(9) 27 ÷ 9 (10) 9 ÷ 9 (11) 81 ÷ 9 (12) 54 ÷ 9

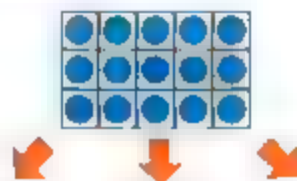
2025

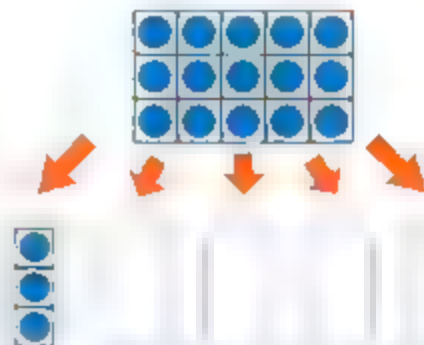
Let us create a mathematical problem for the mathematical sentence 15 · 3 ?

We have learnt two types of division.

- How many will each one get?
- How many will be given?

(a) How many will each one get?

There are 15 biscuits. We will divide them among 3 children. How many biscuits will each one get?

(b) How many will be given?

We will distribute 15 biscuits among some children so that every child can get 3 biscuits. How many children get the biscuits?

Write a mathematical problem in the box below

2025

There are 80 colour papers. If these papers are divided equally among 4 children, how many papers will each one get?

Mathematical sentence, $80 \div 4 =$ ☐

Let's think about how to calculate $80 \div 4$

10	10	10	10
10	10	10	10

There are 8 bundles made up of 10 sheets of paper each. To calculate how many bundles of the 10 sheets each child will get, we can use $8 \div 4$

$8 \div 4 = 2$
$80 \div 4 =$ ☐

☐ Each one will get

1 There are 90 oranges. If these oranges are divided among 3 children equally, how many oranges will each one get?

2 Let us divide

(1) $60 \div 2$ (2) $50 \div 5$ (3) $60 \div 3$ (4) $80 \div 2$

3 Let us tick (✓) the correct answer

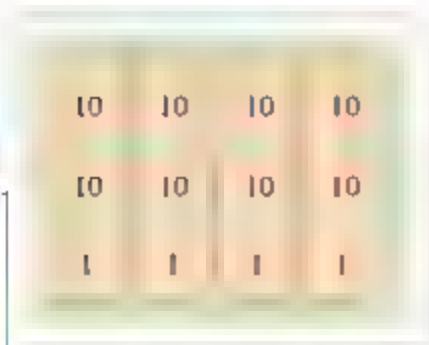
(1) From 12, 3 can be subtracted 4 2 3 times

(2) If we divide 27 by 9 the quotient is 3 4 5

(3) 10 added of 10 times makes 90 100 110

There are 84 sheets of colour papers. If these are divided among 4 children equally, how many sheets of papers will each one get?

Mathematical sentence, $84 \div 4 = \square$

Let's think about how to calculate $84 \div 4$

I've calculated the place of ones and tens separately

$80 \div 4$

(80) (4)

$80 \div 4 = 20$

$4 \div 4 = 1$

$$\begin{array}{r} 20 \\ +\ 1 \\ \hline \square \end{array}$$

Each one will get ___ papers

Share your idea with your friends

1 Let us divide

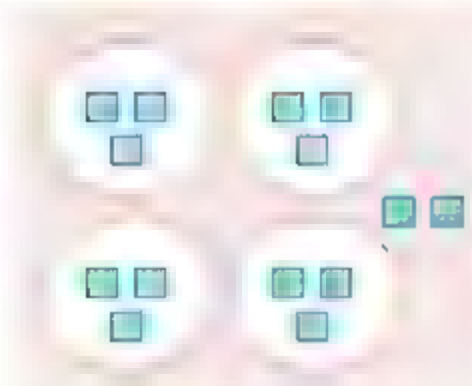
(1) $36 \div 3$ (2) $86 \div 2$ (3) $69 \div 3$ (4) $77 \div 7$

Reza has 14 oranges. And, he wants to divide these oranges among 4 of his friends equally. How many oranges will each one get?

Let us write the mathematical sentence

Let us think about how to get the answer

I use blocks to find the answer

I use multiplication tables for that

When 2 oranges are given to each one,
$4 \times 2 = 8$, remains 6.
When 3 oranges are given to each one,
$4 \times 3 = 12$, remains 2.
When 4 oranges are given to each one,
$4 \times 4 = 16$, 2 remains short.

If I distribute 14 oranges among 4 of my friends, I can give 3 to each of them and 2 oranges will be left.

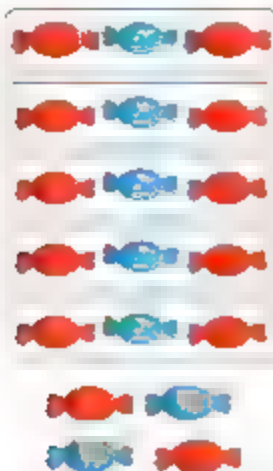
Mathematical sentence $14 \div 4 = 3$, remain 2.

Each of the friends will get 3 oranges and 2 will be left.

$14 \div 4 = 3$, remaining 2

dividend divisor Quotient Remainder

2025

1 You have 19 chocolates. If you give 3 chocolates to each of your friends, how many of them will get these chocolates?

The remainder is smaller than the dividend

remainder < dividend

2 Let us divide

(1) 9 ÷ 2 (2) 14 ÷ 3 (3) 26 ÷ 5 (4) 75 ÷ 9

(5) 67 ÷ 10 (6) 52 ÷ 7 (7) 71 ÷ 8 (8) 41 ÷ 6

3 There is a 30 cm long ribbon. The ribbon is cut into some number of 4 cm long pieces. How many 4 cm long pieces will we get? How many pieces of the ribbon will be left?

2025

4 Let us fill in the blanks below. One is done.

$\boxed{10} = \boxed{4} \times \boxed{2} + \boxed{2}$

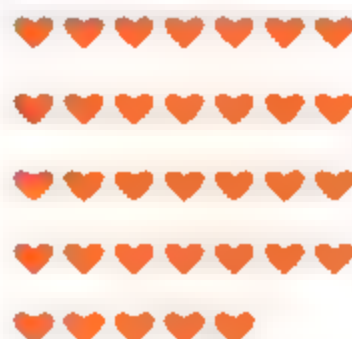
$\boxed{16} = \boxed{6} \times \square + \square$

$\square = \square \times \square + \square$

$\square = \square \times \square + \square$

$\square = \square \times \square + \square$

$\square = \square \times \square + \square$

2025

Let us do

1 Let us tick (√) the correct answer.

(1) What is the remainder of 26 ÷ 5?

(a) 25 (b) 1 (c) 26 (d) 5

(2) Which one of the following is correct?

(a) remainder > divisor (b) remainder divisor

(c) remainder < divisor (d) divisor < remainder

(3) 7) 43 (6
42
———
1

What is the divisor in this division?

a) 1 b) 6 c) 7 d) 43

(4) 125 ÷ 5 = ☐ ; what will be in the blank?

a) 21 b) 25 c) 120 d) 130

2 Let us fill in the blanks.

☐ = ☐ × ☐ + ☐

3 Let us divide.

(1) 8 ÷ 2	(2) 9 ÷ 3	(3) 12 ÷ 2	(4) 21 ÷ 3
(5) 45 ÷ 5	(6) 30 ÷ 6	(7) 64 ÷ 8	(8) 54 ÷ 9
(9) 42 ÷ 7	(10) 35 ÷ 5	(11) 28 ÷ 4	(12) 63 ÷ 7

4 8 mangoes are divided equally between 2 people How many mangoes will each one get?

5 24 lozenges were equally divided among 4 people. How many lozenges will each one get?

2025

6. Taka 27 were divided equally among 3 people. How much money will each one get?

7. 5 people can sit on a bench. How many benches will be needed for 45 people?

8. Nafid bought some quail eggs with taka 32. If the price of an egg is taka 4, how many eggs did Nafid buy?

9. Teams were formed with 8 students in each group. If there were 72 students, how many teams were formed?

10. Sadid is reading a book of 54 pages. If he reads 6 pages in a day how many days will it take to finish reading this book?

11. There are 8 biscuits in a packet. A girl bought 2 packets. How many biscuits did she buy?

12. Let us divide:

(1) $8 \div 3$ (2) $15 \div 2$ (3) $37 \div 5$ (4) $52 \div 7$

(5) $23 \div 8$ (6) $31 \div 4$ (7) $73 \div 10$ (8) $40 \div 9$

13. There are 45 students in a Classroom. 3 students can sit on each bench. How many benches are required for them?

14. 48 guavas were equally divided among 6 people. How many guavas did each one get?

Relation between multiplication and division

Is there any relation between multiplication and division?

Multiplication is adding the same number over and over. On the other hand, division is subtracting the same number over and over.

Then multiplication and division are opposite to each other.

Let us see through an example.

Multiplication	Division	
$7 \times 4 = 28$	$28 \div 4 = 7$	$28 \div 7 = 4$
since,	since,	since,
$7 + 7 + 7 + 7 = 28$	$28 - 4 = 24$, $24 - 4 = 20$, $20 - 4 = 16$, $16 - 4 = 12$, $12 - 4 = 8$, $8 - 4 = 4$, $4 - 4 = 0$	$28 - 7 = 21$, $21 - 7 = 14$, $14 - 7 = 7$, $7 - 7 = 0$

However, multiplication and division are interrelated. We can use this relation to check answers to multiplication and division.

1. Tahsin had 40 colour pencils. He divided the pencils equally into 5 portions and provided 2 portions to Ratul. How many pencils did Ratul get?

Let us think how to find out the number of pencils provided to Ratul.

I think, at first, we have to divide 40 by 5 for equal five portions. I divide it as below and find 8 in each portion.

$$40 \div 5 = 8$$

To provide 2 portions to Ratul, multiply the quotient by 2.

$$8 \times 2 = 16$$

That means, Ratul got 16 pencils.

2 1 pen will be presented to each of the 20 guests at the school function of Proma. She spent taka 120 and brought 20 pens. The teacher asked her to buy 5 more pens. So, how much more money will she need?

3 How to do the calculation $12 \div 2 \times 6$?

Let's use the following sample to do this calculation.

The sample uses multiplication and division. Let's decide which one to do first.

Multiplication and division are calculated from left to right.

$12 \div 2 \times 6$

$= 6 \times 6$

$= 36$

2025

1 Let us fill in the blank box

(1) $15 \div 3 \times 4 =$ ☐ (2) $45 \times 4 \div 5 =$ ☐

(3) $23 \times 4 \div 2 =$ ☐ (4) $63 \div 7 \times 6 =$ ☐

4 Each of 6 baskets has 21 mangoes. If the mangoes are divided among 14 people, how many mangoes will each one get?

First, we need to calculate how many mangoes there are having 21 in each 6 baskets. Then divide to provide it to 14 people.

The solution is: number of mangoes × number of baskets ÷ number of people

Mathematical sentence $\boxed{21} \times \boxed{6} \div 14$

$= \boxed{126} \div \boxed{14}$ ⟶ use multiplication table of 14

$= \boxed{9}$ Each will get 9 mangoes.

2 Buy 4 packets of 30 chocolates. Divide them equally among 15 of your friends. Now, how many chocolates each one will get?

Mathematical sentence ☐ ☐ ☐ ☐ ☐

=

=

☐ chocolates

5 Price of 12 pens is taka 96. How much money is required to buy such 32 pens?

First, we need to calculate the price of 1 pen from the price of 12 pens

96 ÷ 12 → Use the multiplication table of 12 and verify

= 8

Correct

96 ÷ 12 = 8

12 × 8 = 96

The cost of a pen is taka 8.

Now we need to multiply 32 by the price of a pen to find the price of 32 pens

8 × 32

= 256

The price of 32 pens is 256 taka.

3 If the price of 13 bananas is taka 117, how much money will be required to buy 24 bananas?

Mathematical sentence

Step 1

☐ ☐ ☐

= ☐

The price of 1 banana is taka ☐

Step 2

☐ ☐ ☐

= ☐ taka will be required

Let us do

1 Let us tick (√) the correct answer.

(1) Each of 2 packets contains 10 pens. If the pens are divided equally among 5 students, how many pens will each student get? Which is the correct procedure to solve the problem?

(a) Number of packets × number of pens ÷ number of students

(b) Number of packets × Number of students ÷ Number of pens

(c) Number of pens × Number of students ÷ Number of packets

(d) Number of pens × Number of packets ÷ Number of students

(2) Which one of the following is correct to express $7+7+7+7+7+7+7+7$?

(a) $7+8$ (b) 8×7 (c) 7×8 (d) 7×7

(3) Tk. 8 was collected from each of the 30 students. The total amount was divided equally between 2 friends to buy notebooks. How much money did each friend get?

(a) Tk. 240 (b) Tk. 120 (c) Tk. 60 (d) Tk. 30

(4) Moyna studies for 2 out of 8 portions of a day. How many hours does she study in a day?

(a) 3 hours (b) 4 hours (c) 6 hours (d) 8 hours

2 Answer in short.

(1) What is it called to add a number repeatedly?

(2) Express $4+4+4+4+4$ in multiplication.

(3) What is it called to subtract a number repeatedly?

(4) How many times can 4 be subtracted from 136?

(1) Express adding 7 for 25 times in an alternative way.

(2) Express adding 18 for 3 times in an alternative way.

2025

3 Fill in the blanks.

(1) $18 \div 6 \times 7$ = ☐ (2) $42 \div 7 \times 8$ = ☐

(3) $15 \times 5 \div 3 =$ ☐ (4) $72 \div 8 \times 10 =$ ☐

4 12 friends will buy 18 notebooks for Tk. 22 per notebook. How much will each of them pay?

5 3 notes of 500 taka are divided among 15 people How much money will each person receive?

6 63 friends donated at the rate of Tk. 50 and distributed it among 9 helpless families. How much money will each family receive?

7 Helen provided 5 of 13 portions of a 104 meter long ribbon to her younger brother Rifat How many meters of ribbon did Rifat receive?

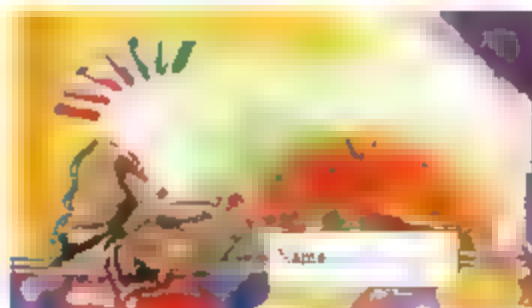
8 How much is 4 portions from 9 portions of Tk. 99?

9 Salma travels 13 portions from 14 portions of 112 kilometers path by bus and walks the rest How far does she travel by bus?

10 Let us make a story for the following mathematical sentence.

$$65 \div 13 \times 4 = \square$$

Problems related to addition, subtraction, multiplication and division

A pencil costs taka 20 and a drawing book costs taka 150. How much money will it require to buy 5 pencils and 1 drawing exercise book?

First we need to calculate the cost of 5 pencils to find the total cost

For this calculation, we need to multiply first and then add

1. To get the price of 5 pencils we need to multiply the price of a pencil by 5

If the price of 1 pencil is 20 taka, the price of 5 pencils will be

$20 \times 5 = 100$

100 taka

2. The cost of a drawing exercise book is 150 taka. So, to find the cost of 5 pencils and 1 drawing book we need to add the cost of 1 drawing book to the cost of 5 pencils.

To buy 5 pencils and 1 drawing book, we need

$100 + 150 = 250$

250 taka

2025

1 There are 30 mangoes in each of the 6 baskets. Another basket has 37 mangoes. How many mangoes are there in 7 baskets?

There are a total of [ ] × [ ] = [ ] mangoes in 6 baskets.

7 baskets have a total of [ ] + [ ] = [ ] mangoes.

The mathematical sentence would be

[ ] × [ ] + [ ]

= [ ] + [ ]

= [ ] mangoes

Let's think about more ways to solve it.

2 Mr. Rahim paid 750 taka to the shopkeeper to buy 4 watermelons at the rate of taka 185. How much money will the shopkeeper give him back?

185 taka 185 taka 185 taka 185 taka

To solve the problem we need to multiply first and then subtract.

What would be the mathematical sentence to solve the problem?

Mathematical sentence would be, 750 – 185 × 4 = [ ]

2025

1. First, it is required to multiply the price of 1 watermelon 185 taka by 4

$185 \times 4 = 740$ taka

2. The price of 4 watermelons need to be subtracted from 750

$750 - 740 = 10$

The shopkeeper will return 10 taka

3. 42 students of class 3 of a school collected 30 taka from each and donated 1000 taka to help the flood victims. How much money do they have now?

30 students contributed a total of ☐ × ☐ = ☐ taka

After donating to the flood victims, they have left with

☐ − ☐ = ☐ taka

The mathematical sentence ☐ × ☐ ☐

= ☐ − ☐

= ☐

Rest of the money is ☐ taka.

4 The price of a book is 95 taka and the price of 12 pens is 180 taka. How much money will require for Reza to buy 1 pen and 1 book?

Price of 1 book is given. We need to find the price of 1 pen.

1. To find the price of a pen we need to divide 180 taka by 12.

$180 \div 12 = 15$ taka

2. Add the price of 1 book and 1 pen.

The price of 1 book and 1 pen is $95 + 15 = 110$

$= 110$ taka

5 Your father gave you Tk. 250 and mother gave Tk. 150. You want to buy notebooks and pens for 5 friends of your class. How much money can you spend for each friend?

Total amount is [ ] + [ ] = [ ] taka.

Each one can be givan [ ] ÷ [ ] = [ ] taka.

Each one can be givan [ ] taka.

6 60 litchis are plucked from each of 15 litchi trees in a garden and divided equally among 20 people. How many will each of them receive?

To solve the problem we need to multiply first and then divide.

1. First we need to multiply 60 litchis of a tree

$60 \times 15 = 900$

900 litchis

2. Total Litchis is to be divided by 20.

$900 \div 20 = 45$

45 litchis

2025

7 On the occasion of Eid, 12 kg rice was collected from each of 30 wealthy people to help the poor people of a village. If the collected rice is divided equally among 18 poor families, how many kg of rice will each family receive?

Total amount of rice □ × □ kg = □ kg

Each family can be given □ kg □ ÷ □ = □ kg

The mathematical sentence □ × □ ÷

= □ ÷ □

= □

Each family can be given □ kg

8 550 mangoes were plucked from one tree, out of those 46 mangoes were green. If ripe mangoes are divided equally among 8 people, how many will each one receive?

To solve the problem, first we need to subtract the number of green mangoes. Then it is required to divide by 8.

What would be the mathematical sentence to solve the problem?

1. First we need to subtract 46 from 550.

$550 - 46 = 504$ ripe mangoes

2. divide 504 ripe mangoes by 8.

$504 \div 8 = 63$

63 mangoes

9 Make a story using the following mathematical sentences (One is done for you).

$75 \div 3 + 46 =$ □	Plucking 75 litchis from a tree, 3 friends divided them among themselves equally. Also, each of them received 46 litchis from another tree. How many litchis did each one receive?
$55 \times 30 \div 50 =$ □	
35×12 145 □	

2025

Let us do

1 Let us tick (√) the correct answer.

(1) Nahid picked 30 mangoes and kept 10 mangoes aside. He distributed the remaining mangoes equally among 5 friends. How many mangoes did each friend get?

a) 3 b) 4 c) 6 d) 20

(2) You took Tk. 150 from your father and Tk. 60 from your mother. You divided the sum equally among 3 friends to buy notebooks and pens. How much money did each friend get?

a) Tk.150 b) Tk. 90 c) Tk. 70 d) Tk. 60

(3) The price of a pencil is Tk. 20 and the price of 1 notebook is Tk. 30. What is the price of 3 pencils and 1 notebook?

a) Tk. 30 b) Tk. 50 c) Tk. 60 d) Tk. 90

(4) If the price of 1 dozen eggs is Tk. 120, what is the price of 4 eggs?

a) Tk. 10 b) Tk. 30 c) Tk. 40 d) Tk. 48

(5) If 8 mangoes are picked from each of 6 trees and the total mangoes are divided equally among 4 people, how many mangoes will each person get? Which one of the following is correct to solve the problem?

a) $8 \times 6 \div 4$ b) $8 \div 4 \times 6$ c) $6 \div 4 \times 8$ d) $6 \times 8 \div 4$

(6) Raisa gave 4 chocolates to each of her five friends and kept 2 for herself. Which of the following is correct to estimate how many chocolates she had?

a) $5 \div 4 + 2$ b) $5 \times 4 - 2$ c) $4 - 5 + 2$ d) $4 \times 5 + 2$

2 The price of a pencil is 20 taka and the price of 5 note books is 150 taka. How much money will be required to buy 5 pencils and 5 note books?

3 A book and 3 pens cost 95 taka altogether. A pen costs 20 taka. How much is the price of a book?

4. A bookshelf can hold 42 books. There are 2 such shelves full of books. Besides there are 8 more books. How many books are there in total?

5. Faisal receives a stipend of 120 taka per month. From his 12 months stipend's money, he gives 120 taka to his sister Reena. How much money does he have now?

6. There are 74 litchis in a basket. Another basket has 70 litchis. The litchis of two baskets were put together and divided equally among 8 people. How many litchis did each one get?

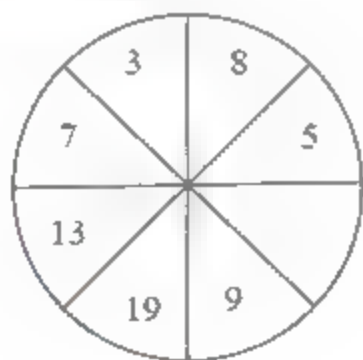
7. Surma sells 6 dozen eggs at taka 120 per dozen and from that she spends taka 95. She keeps the rest of the money in the bank. How much money does she save in the bank?

8. Each of 40 students contribute 80 taka to help flood victims and the total amount is divided equally among 10 people. How much money does everyone receive?

9. Luna receives a stipend of taka 1800 per year. She deposits taka 55 per month from the stipend in her money bank and spends the rest. How much money does she spend per month?

10. Let us create a story:

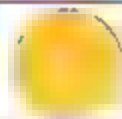
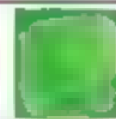
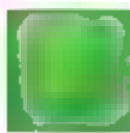
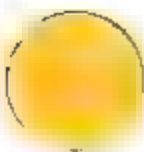
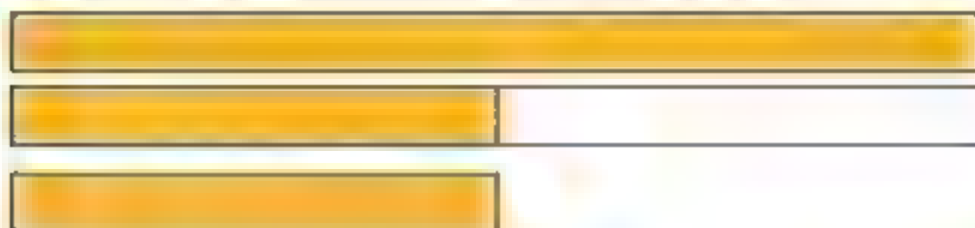
    (a) 350 – 50 + 6   (b) 50 ×30 – 950

11. Let us find the missing number

Fractions

We have a bread. How can we divide the bread so that Reza and Mina can share the bread equally?

Can I divide this way?

Here the two portions are not equal. We will divide the bread into two equal portions.

Let us divide the two adjacent shapes of paper into equal parts.

(1)

(2)

2 Let us divide a strip of paper into two equal parts

When we divide an object into 2 equal parts, we call each part a half or one of two parts and write $\frac{1}{2}$

$\frac{1}{2}$
half or one of two parts

1 Which piece is $\frac{1}{2}$ of a?

2 Let us colour $\frac{1}{2}$ of each shape below

3 What will be formed if two $\frac{1}{2}$'s are put together?

2025

A paper is divided into 4 equal parts. What is each part called?

When we take one of two parts of some thing whole or full, we write it $\frac{1}{2}$. So if we divide into four equal parts and take 1 part then we write $\frac{1}{4}$.

When we divide an object into four equal parts, we call one of these parts a quarter or one fourth and write $\frac{1}{4}$

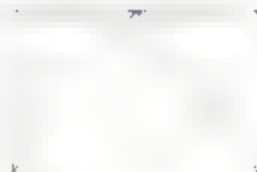
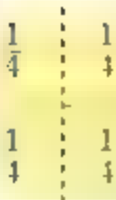
$\frac{1}{4}$ or one quarter or one fourth

Numbers such as $\frac{1}{2}$ and $\frac{1}{4}$ are called fractions

1. Let us colour $\frac{1}{4}$ part of each shape below.

I

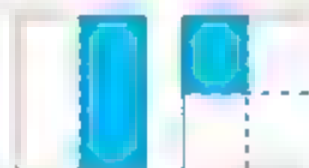
$\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$

$\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$

If four $\frac{1}{4}$ s are put together ☐ is formed

2025

2 Tick (√) the correct answer based on the figure above)

$\frac{1}{4}$ is greater/equal/less than $\frac{1}{2}$
Two pieces of $\frac{1}{4}$ are greater equal less than $\frac{1}{2}$
Three pieces of $\frac{1}{4}$ are greater than equal to less than $\frac{1}{2}$

3 Meena compared the dark coloured parts of the figure on the right and said that $\frac{1}{2}$ is smaller than $\frac{1}{4}$ Is Meena's comparison correct? Why?

4 Let us draw two figures of equal shape as we desire and colour $\frac{1}{2}$ part of one and $\frac{1}{4}$ part of the other

How can we express in fractions?

1 meter long ribbon is divided into three equal parts.

$\frac{1}{3}$ meter $\frac{1}{3}$ meter $\frac{1}{3}$ meter

Each of these divided parts of the ribbon is called one-third of 1 meter and write $\frac{1}{3}$

1. How long is the painted part?

1meter

(1)

☐ meter

1meter

(2)

☐ meter

2 Let us colour $\frac{1}{3}$ part

1meter

$\frac{1}{3}$ $\frac{1}{3}$ $\frac{1}{3}$

☐ meter

There are two $\frac{1}{3}$ here So ...

2 of 3 equal pieces of 1 meter is called two-thirds of 1 meter It is written as $\frac{2}{3}$ meter.

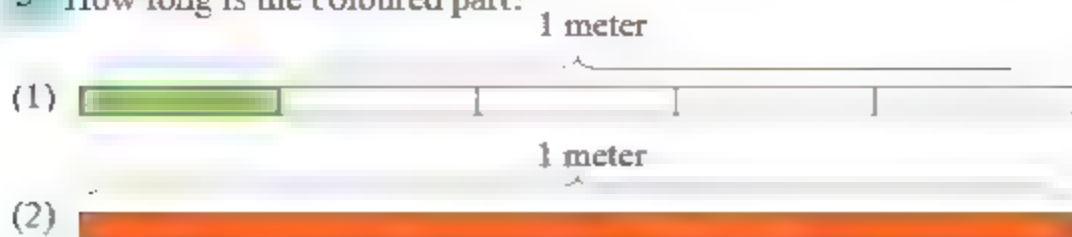
2025

$\frac{3}{3}$ meter is equivalent to 1 meter.

3 How long is the coloured part?

(1)

1 meter

(2)

4 Let us colour.

(1) Colour $\frac{3}{5}$ part.

(2) Colour $\frac{7}{8}$ part

Numbers like 3/5 and 7/8 are called fractions. Here 3 and 7 are called numerators and 5 and 8 are called denominators.

fraction

numerator 3
denominator 5

5 Indicate numerator by ⌒ and denominator by ⌣ . For example-

$\frac{1}{3}$

(1) $\frac{4}{5}$ (2) $\frac{1}{7}$ (3) $\frac{5}{8}$ (4) $\frac{7}{9}$

6 Write a fraction whose denominator is 9 and numerator is 5.

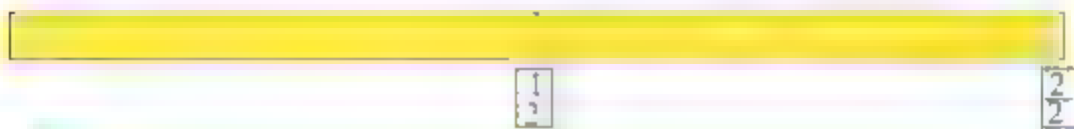
7 Answer the questions related to the figure below

(1) Write the fraction in the blank box.

(2) Where are the 5 pieces of $\frac{1}{5}$ in the above figure?

(3) Which is longer $\frac{2}{5}$ meter or $\frac{3}{5}$ meter?

8 Let us write the coloured part of the figure below as a fraction

9 Let us compare the following fractions

$\frac{1}{2}$ and $\frac{2}{4}$ are the same!

Again $\frac{2}{2}$ and $\frac{4}{4}$ are the same and equal to 1

1 Let us examine the figure carefully and discuss our findings

Which fractions are equal to $\frac{1}{2}$?

Which fractions in the figure are of equal value?

Fractions that have equal value are called equivalent fractions.

The equivalent fractions of $\frac{1}{2}$ are $\frac{2}{4}$, $\frac{3}{6}$, $\frac{4}{8}$, $\frac{5}{10}$

2 Let us find the equivalent fraction of $\frac{1}{2}$

If we multiply the numerator and denominator by 2, we get $\frac{1 \times 2}{2 \times 2} = \frac{2}{4}$

$\frac{1 \times 3}{2 \times 3} = \frac{\square}{\square}$ $\qquad$ $\frac{1 \times \square}{2 \times \square} = \frac{4}{8}$ $\qquad$ $\frac{1 \times 5}{2 \times 5} = \frac{\square}{\square}$

When the numerator and denominator of a fraction are multiplied by the same number, the resulting fraction is equivalent to the previous fraction.

How do we find equivalent fractions easily?

Let us investigate

Let us check with two equivalent fractions $\frac{1}{2}$ and $\frac{2}{4}$

$$\frac{1}{2} \quad \times \quad \frac{2}{4} \quad \begin{array}{l} \longrightarrow 2 \times 2 = 4 \\ \longrightarrow 1 \times 4 = 4 \end{array}\Bigg\}$$

If the cross products of numerator and denominator of two fractions are the same, then the two fractions will be equivalent.

Let us check the following pair of fractions and find equivalent fractions

$\frac{2}{4}$, $\frac{3}{6}$ → ☐ → ☐　　　$\frac{3}{6}$, $\frac{4}{8}$ → ☐ → ☐

$\frac{3}{8}$, $\frac{5}{10}$ → ☐ → ☐　　　$\frac{4}{8}$, $\frac{5}{10}$ → ☐ → ☐

Let us find the equivalent fraction of $\frac{1}{3}$ and $\frac{1}{4}$.

3 Let us write equivalent fractions in the blanks

Fraction	Equivalent Fraction	Equivalent Fraction	Equivalent Fraction	Equivalent Fraction	Equivalent Fraction	Equivalent Fraction	Equivalent Fraction
$\frac{2}{3}$	$\frac{4}{6}$	$\frac{6}{9}$					
$\frac{3}{4}$							
$\frac{3}{5}$							
$\frac{1}{6}$							

4 Let us find whether the following pairs of fractions are equivalent or not and tick (✓)

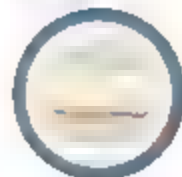
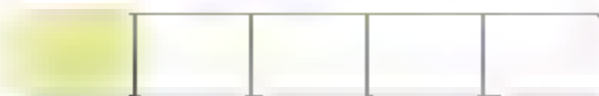
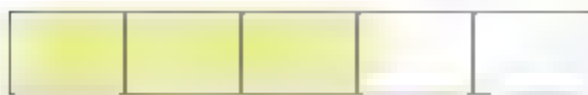
Fraction	Calculation	Equivalent Fraction	Not equivalent Fraction
$\frac{3}{4}$, $\frac{9}{12}$	$4 \times 9 = 36$ $3 \times 12 = 36$	✓	
$\frac{2}{5}$, $\frac{3}{10}$			
$\frac{4}{6}$, $\frac{8}{12}$			
$\frac{3}{5}$, $\frac{9}{10}$			

12 Let us compare the following pair of fractions and write small-large using < or >

(a) $\frac{1}{3}$ 　 $\frac{2}{3}$ 　　(b) $\frac{2}{5}$ 　 $\frac{4}{5}$ 　　(c) $\frac{7}{8}$ 　 $\frac{5}{8}$ 　　(d) 1 　 $\frac{6}{7}$

Here the denominators of each pair of fractions are the same. So we will compare the numerators only. We know how to compare numbers.

Addition of fractions

Riya got $\frac{3}{5}$ and his brother, Rafi got $\frac{1}{5}$ of a bread. How many portions of bread did they get together?

How do we add $\frac{3}{5} + \frac{1}{5}$?

How many $\frac{1}{5}$ portions are there in $\frac{1}{5}$ and $\frac{3}{5}$?

There are one and three $\frac{1}{5}$ portions

$$\frac{3}{5} + \frac{1}{5} = \frac{\square}{\square}$$

1 Zahid takes $\frac{2}{5}$ hours to complete his math homework and $\frac{3}{5}$ hours to complete his English homework. How many hours does he take to do the homework of these two subjects?

The calculation is simple. We will calculate 2 and 3 of $\frac{1}{5}$ as before.

$$\frac{2}{5} + \frac{3}{5} = \frac{5}{5} = 1$$

1 hour

When we add fractions with common denominator, the denominator of the sum is the common denominator of the fractions and the numerator is the sum of the numerators of the fractions.

$\frac{3}{7} + \frac{2}{7} = \frac{\square}{\square}$

1 Let us add

(1) $\frac{1}{3} + \frac{2}{3}$ (2) $\frac{1}{4} + \frac{2}{4}$ (3) $\frac{2}{5} + \frac{2}{5}$ (4) $\frac{3}{4} + \frac{1}{4}$

(5) $\frac{3}{7} + \frac{1}{7}$ (6) $\frac{1}{5} + \frac{4}{5}$ (7) $\frac{5}{6} + \frac{1}{6}$ (8) $\frac{3}{8} + \frac{5}{8}$

(9) $\frac{5}{7} + \frac{2}{7}$ (10) $\frac{1}{9} + \frac{8}{9}$ (11) $\frac{4}{8} + \frac{3}{8}$ (12) $\frac{4}{9} + \frac{3}{9}$

3 $\frac{1}{7}$ portion of a bamboo is red and $\frac{3}{7}$ portions are green. How many portions are coloured?

We have coloured

$\frac{1}{7}$ portion + $\frac{3}{7}$ portion

$= \frac{1}{7} + \frac{3}{7} = \frac{\square}{7} = \frac{\square}{\square}$

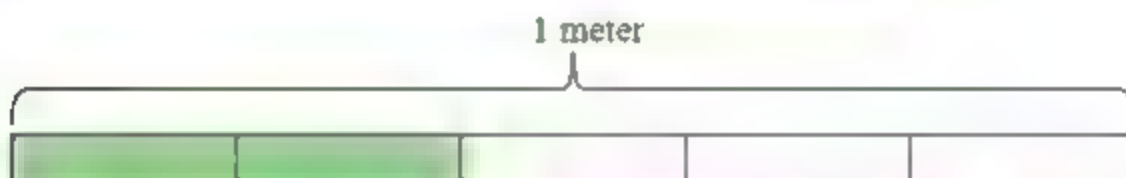
2 Riya bought $\frac{1}{5}$ meter and Lia $\frac{3}{5}$ meter of coloured ribbon from a shop. How many meters of ribbon did they buy together?

3 Rafi eats $\frac{5}{8}$ portions of a cake and Nidhi eats $\frac{2}{8}$ portions. How many portions do they eat together?

4 Reza's house is $\frac{2}{10}$ kilometer west from the school and Mina's house is $\frac{3}{10}$ kilometer east. How far is Mina's house from Raza's house?

2025

Subtraction of fractions

Reza has $\frac{4}{5}$ meters of ribbon. If he gives $\frac{2}{5}$ meters of ribbon to Mina, how many meters of ribbon will she have?

How many $\frac{1}{5}$ portions are there in $\frac{4}{5}$ and $\frac{2}{5}$?

In $\frac{4}{5}$ we have 4 and in $\frac{2}{5}$, 2 of $\frac{1}{5}$ portions.

$\frac{4}{5} - \frac{2}{5} = \frac{\square}{\square} = \frac{\square}{\square}$ meter

1 How have we subtracted $1 - \frac{3}{4} = \frac{1}{4}$

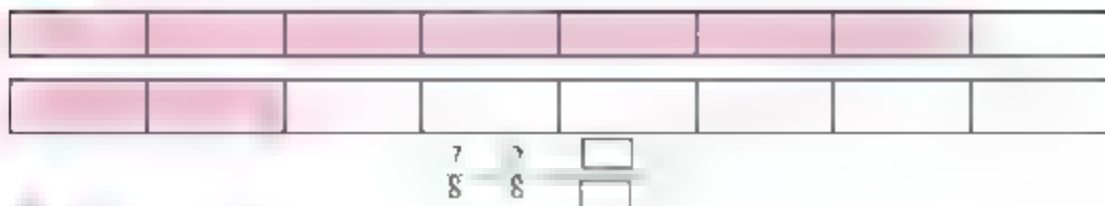
So we get $\frac{4}{4} - \frac{3}{4} = \frac{1}{4}$

In subtraction of fractions with common denominator, the denominator of the difference is the common denominator of the two fractions, and the numerator is obtained by subtracting the numerator of minuend from the numerator of subtrahend.

2 How is subtracted? $\frac{7}{8} - \frac{2}{8}$

$\frac{7}{8} - \frac{2}{8} = \frac{\square}{\square}$

Let us subtract

(1) $1 - \frac{1}{3}$ (2) $\frac{2}{3} - \frac{1}{3}$ (3) $\frac{3}{4} - \frac{1}{4}$ (4) $1 - \frac{1}{5}$

(5) $\frac{4}{5} - \frac{2}{5}$ (6) $\frac{5}{6} - \frac{3}{6}$ (7) $\frac{4}{7} - \frac{3}{7}$ (8) $1 - \frac{3}{8}$

(9) $\frac{7}{9} - \frac{2}{9}$ (10) $\frac{7}{8} - \frac{3}{8}$ (11) $1 - \frac{4}{9}$ (12) $\frac{8}{9} - \frac{2}{9}$

3 Sifat has planted flower seedlings in $\frac{5}{9}$ portions of the garden. Moni has also planted flower seedlings in $\frac{4}{9}$ portions of the garden. Who has planted more flower seedlings and how many portions more?

Both fractions have the same denominator. So comparing the numerator we get that Sifat has planted flower seedlings in more portions.

Mathematical sentence $\frac{\square}{\square} - \frac{\square}{\square} = \frac{\square - \square}{\square} = \frac{\square}{\square}$

Sifat has planted flower seedlings in $\frac{\square}{\square}$ more portions.

2 Ria has $\frac{4}{5}$ liters of juice and Hiya has $\frac{3}{5}$ liters of juice. How many more liters of juice does Ria have?

3 Roni eats $\frac{3}{7}$ portions of a cake and Moni eats $\frac{5}{7}$ portions. How many portions does Moni eat more than Roni?

4 Nidhi took $\frac{6}{11}$ portions of the 1 meter ribbon and Dia took $\frac{2}{11}$ portions. Who took more ribbons and how many portions more?

Let us do

1 Let us tick (√) the correct answer

(1) Which of the following indicates the empty part of the image?

a) $\frac{2}{8}$ b) $\frac{5}{8}$ c) $\frac{6}{8}$ d) $\frac{7}{8}$

(2) Which one of the following is correct?

a) $\frac{5}{9} > \frac{2}{9}$ b) $\frac{5}{9} < \frac{2}{9}$ c) $\frac{2}{9} > \frac{4}{9}$ d) $\frac{5}{9} \quad \frac{2}{9}$

(3) $\frac{8}{9} \square \frac{3}{9} = \frac{5}{9}$, Which one of the following symbols will fit in the blank box?

a) + b) − c) × d) ÷

(4) Ria ate $\frac{1}{4}$ of a cake. How much of the cake does Raisa need to eat to be equivalent to Ria?

a) $\frac{2}{4}$ b) $\frac{2}{6}$ c) $\frac{1}{8}$ d) $\frac{2}{10}$

(5) Which one of the following fractions are equivalent to $\frac{3}{4}$?

a) $\frac{3}{8}, \frac{6}{12}, \frac{9}{16}$ b) $\frac{6}{8}, \frac{9}{12}, \frac{12}{16}$ c) $\frac{6}{8}, \frac{8}{12}, \frac{12}{16}$ d) $\frac{6}{8}, \frac{9}{12}, \frac{15}{16}$

(6) Which one of the following fractions is equal to 1?

a) $\frac{4}{6}$ b) $\frac{3}{5}$ c) $\frac{3}{4}$ d) $\frac{3}{3}$

(7) From the school, Rashed's house is $\frac{3}{8}$ km west and Mili's house is $\frac{2}{8}$ km east. How far is Mili's house from Rashed's?

a) $\frac{1}{8}$ km b) $\frac{2}{8}$ km c) $\frac{3}{8}$ km d) $\frac{5}{8}$ km

(8) Russell drank $\frac{4}{5}$ liters of water and Rhea drank $\frac{3}{5}$ liters of water. How much more water did Russell drink than Riya?

a) $\frac{4}{5}$ liter b) $\frac{3}{5}$ liter c) $\frac{2}{5}$ liter d) $\frac{1}{5}$ liter

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2 Let us match the right column with the left column by drawing lines.

		$\frac{6}{5}$
together		Equivalent fractions
		1
		$\frac{3}{5}$

3 The numerators and denominators of some fractions are given below Write the fractions.

(1) numerator 7 denominator 13

(2) denominator 11 numerator 7

(2) numerator 9 denominator 17

(4) denominator 12 numerator 5

4 Let us look at the figure and match by drawing lines.

5 Let us write 3 equivalent fractions for the following fractions.

Fraction	Equivalent Fraction	Equivalent Fraction	Equivalent Fraction
$\frac{1}{2}$			
$\frac{3}{4}$			
$\frac{2}{3}$			
$\frac{5}{6}$			

6 Let us check whether the following pairs of fractions are equivalent or not. Write equivalent or not equivalent in the blank boxes

$\frac{2}{5}, \frac{3}{10}$		$\frac{1}{4}, \frac{4}{16}$	
$\frac{2}{7}, \frac{6}{21}$		$\frac{3}{8}, \frac{6}{24}$	
$\frac{3}{8}, \frac{5}{12}$		$\frac{1}{7}, \frac{3}{21}$	

7 Let us add.

(1) $\frac{1}{3} + \frac{2}{3}$ (2) $\frac{3}{4} + \frac{1}{4}$ (3) $\frac{3}{5} + \frac{1}{5}$ (4) $\frac{1}{4} + \frac{1}{4}$

(5) $\frac{3}{5} + \frac{2}{5}$ (6) $\frac{1}{6} + \frac{5}{6}$ (7) $\frac{5}{7} + \frac{1}{7}$ (8) $\frac{2}{8} + \frac{5}{8}$

(9) $\frac{4}{7} + \frac{3}{7}$ (10) $\frac{1}{9} + \frac{5}{9}$ (11) $\frac{5}{8} + \frac{3}{8}$ (12) $\frac{7}{9} + \frac{1}{9}$

8 Let us subtract.

(1) $1 - \frac{1}{3}$ (2) $\frac{5}{6} - \frac{1}{6}$ (3) $\frac{3}{5} - \frac{1}{5}$ (4) $1 - \frac{1}{7}$

(5) $\frac{3}{6} - \frac{2}{6}$ (6) $\frac{5}{7} - \frac{3}{7}$ (7) $\frac{5}{8} - \frac{2}{8}$ (8) $1 - \frac{5}{8}$

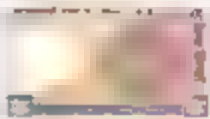
(9) $\frac{8}{9} - \frac{3}{9}$ (10) $\frac{7}{8} - \frac{1}{8}$ (11) $1 - \frac{7}{9}$ (12) $\frac{7}{9} - \frac{2}{9}$

9 Moni's house is $\frac{7}{10}$ kilometers to the north from the school and Fahim's house is $\frac{3}{10}$ kilometers to the south. What is the distance of Moni's house from Fahim's house?

10 The distance of Sami's house from the school is $\frac{2}{7}$ kilometers and the distance of Mina's house is $\frac{3}{7}$ kilometers. Whose house is more distant from school and how many kilometers?

11 $\frac{4}{7}$ portions of a cake is given to Reza and $\frac{3}{7}$ to Roni. How many more portions of cake was given to Reza than Roni?

Bangladeshi Currency

What are the pictures of ?

I have no idea what these pictures are. But these look like coins in the Math book of class two.

I think these are pictures of paisa. I have heard that paisa was used to buy things in the past.

1. Let us find out what paisas are there in the picture below.

Equivalence of notes to metallic coins

Metallic coins	Value	Paper notes
	1 taka	
	2 taka	
	5 taka	

What is the relation between paisa and taka?

Let us see their relation.

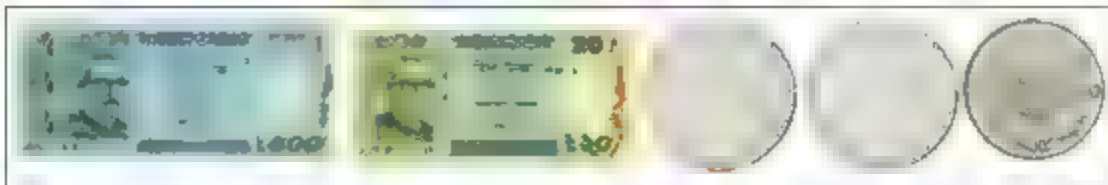
 and together and together

50 paisa + 50 paisa = 1 taka

100 paisa and 1 taka are of equal value. Do you know how to read and write taka and paisa in numbers?

Yes I know, like if and are together, you have to read 20 taka fifty paisa and write 20 taka 50 paisa.

Let us read the following currency and write in numbers.

Here, 100 taka + 50 taka + 5 taka = 155 taka and 5 paisa + 10 paisa = 15 paisa. So, we will write 155 taka 15 paisa.

500 taka + 20 taka = 520 taka

50 paisa + 50 paisa + 25 paisa = 125 paisa

We have learnt, 100 paisa = 1 taka, then 125 paisa = 1 taka 25 paisa

We will write (520+1) taka 25 paisa so, we will write 521 taka 25 paisa

2 Let us look at the picture and write in the numbers

Picture	in numbers
	500 taka 75 paisa

3 Read and write in numbers

In words	in numbers
a) Twelve taka forty five paisa	12 taka 45 paisa
b) Five hundred taka sixty two paisa	
c) Seven hundred twenty five taka seventy five paisa	
d) One thousand two hundred taka fifty paisa	
e) Nine hundred fifty five taka thirty paisa	
f) Three thousand eight hundred twenty five taka	

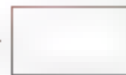
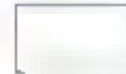
If there are 2 notes of 10 taka and 2 notes of 500 taka, what is the total amount of taka?

The calculation can be done here as we have done with numbers

2 notes of 10 taka and 20 taka are of equal value

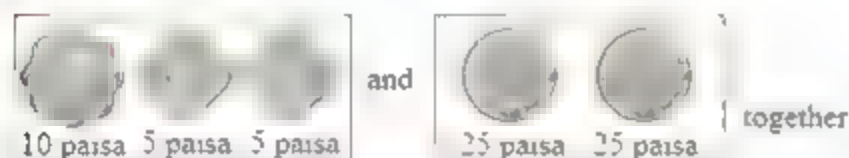
2 notes of 500 taka and 1000 taka are of equal value

The amount of money will be 1000 − 20 = 1020 taka

1 Let us exchange currency

Let us solve

(1) 20 notes of 5 taka = ____ taka	(7) 5 notes of 100 taka = ____ taka
(2) 4 notes of 50 taka = ____ taka	(8) 2 notes of 500 taka = ____ taka
(3) 10 notes of 20 taka = ____ taka	(9) ____ notes of 10 taka = 200 taka
(4) 5 notes of 10 taka = ____ taka	(10) ____ notes of 100 taka = 1000 taka
(5) 100 notes of 1 taka = ____ taka	(11) ____ notes of 5 taka = 100 taka
(6) 50 notes of 2 taka = ____ taka	(12) ____ notes of 20 taka = 200 taka

Let us calculate

together

We will calculate like summation

$$10 + 5 + 5 + 25 + 25 = 70$$

10, 10, 50

Total 70 paisa

$$10 + 25 + 25 + 50 = 110$$

100 paisa = 1 taka
What would be the answer?

Total 1 taka 10 paisa

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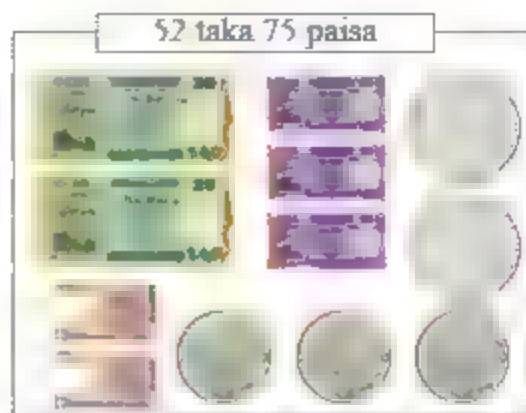
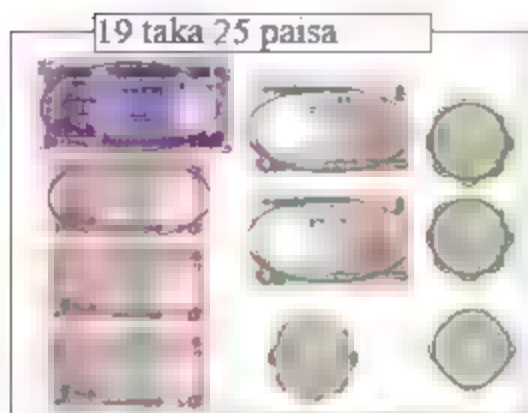
Let us circle the notes and coins to make the amount money in the box . (One is shown)

Let us calculate

(1) 5 paisa + 5 paisa + 10 paisa + 25 paisa + 3 taka = ☐

(2) 1 paisa + 10 paisa + 50 paisa + 2 taka + 5 taka = ☐

(3) 20 taka + 25 paisa + 50 paisa + 30 taka = ☐

(4) 5 paisa + 25 paisa + 10 taka + 2 taka + 10 paisa = ☐

1 Bakul bought a book for 65 taka 75 paisa. How many ways can she pay using 20 taka, 10 taka, 5 taka, 2 taka and 5 paisa, 10 paisa, 25 paisa?

five taka 2, one taka 5, one taka 10, two taka 20 and three of 25 paisa can be paid.

Payment can also be made in other ways

The price	taka				paisa		
	2 taka	5 taka	10 taka	20 taka	5 paisa	10 paisa	25 paisa
65 taka 75 paisa							

 Let us add

150 taka 65 paisa + 67 taka 83 paisa

```
   150 taka 65 paisa
 +  67 taka 83 paisa
 -------------------
   218 taka 48 paisa
```

148 paisa = 1 taka 48 paisa
So we will add 1 taka to 217 taka

Total 218 taka 48 paisa

2 2 Let us add

(1) 35 taka 55 paisa + 28 taka 34 paisa
(2) 77 taka 49 paisa + 42 taka 85 paisa
(3) 259 taka 75 paisa + 137 taka 65 paisa
(4) 2155 taka 35 Paisa + 785 taka 90 Paisa
(5) 4740 taka 55 Paisa + 389 taka 65 Paisa

3 Rafi has 225 taka 25 paisa. If he buys a ball costing105 taka 75 paisa, how much money will be left with him?

$$\begin{array}{r} 225 \text{ taka } 25 \text{ paisa} \\ -\ 105 \text{ taka } 75 \text{ paisa} \\ \hline \text{.... taka ..... paisa} \end{array}$$

In this case we cannot subtract 75 from 25. Then how to calculate?

I will convert 1 taka to paisa like subtraction. We know that 1 taka is equivalent to 100 paisa.

Paisa If 1 taka is converted to paisa, then the calculation will be

125 – 75 = 50

taka 1 taka was converted in paisa. So the calculation will be

225 – 1 = 224

224 – 105 = 119

gets back 119 taka 50 paisa

3 Let us subtract

(1) 95 taka 60 Paisa – 42 taka 20 Paisa

(2) 360 taka 80 paisa – 215 taka 35 paisa

(3) 755 taka 45 paisa – 345 taka 20 paisa

(4) 475 taka 15 Paisa – 99 taka 75 Paisa

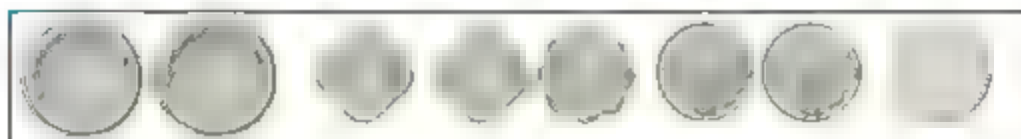
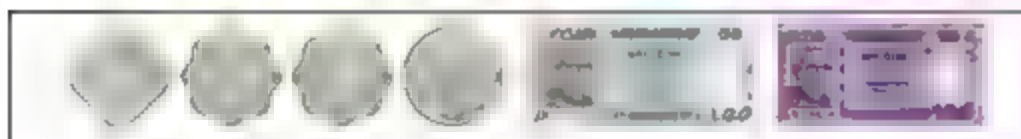
(5) 80 taka – 37 taka 50 paisa

(6) 824 taka 45 paisa – 307 taka 75 paisa

(7) 900 taka – 279 taka 55 Paisa

4 Let us buy things as we wish.

Let us do

How much taka and paisa are there in the box?

Let us do the following calculations

(a) 45 taka 75 paisa + 35 taka 80 paisa =

(b) 37 taka 20 paisa − 21 taka 70 paisa =

(c) 69 taka 35 paisa
+ 37 taka 77 paisa
...... taka .... paisa

(d) 89 taka 42 paisa
− 45 taka 89 paisa
.... taka ....paisa

(e) 78 taka 50 paisa
− 42 taka 75 paisa
...... taka .... paisa

(f) 200 taka 20 paisa
− 10 taka 40 paisa
...... taka ...... paisa

Usha had 65 taka 75 paisa. His mother gave her 82 taka 75 paisa to buy the notebook. How much money has Usha now?

Jubayer bought a toy for 78 taka 25 paisa. If he gives 100 taka to the shopkeeper, how much money will the shopkeeper give him back?

Two notebooks cost 80 taka and one pen costs 25 taka 75 paisa. Arisha gave a note of 200 taka to the shopkeeper to buy these items. How much money will the shopkeeper return to Arisha?

Simul bought rice for 85 taka 75 paisa and vegetables for 45 taka 55 paisa. How much money does he spend in total?

Mitu had 135 taka 25 paisa. Her father gave him 65 taka 75 paisa. How much money did he have?

Tamanna bought a packet of biscuits for 35 taka 75 paisa. She gave a 50 taka note to the shopkeeper. How much money did the shopkeeper return to Tamanna?

Lily went to the shop with 300 taka. He bought a pair of shoes for 120 taka 65 paisa. How much money did he have?

David has 542 taka 78 paisa. His uncle gave him another 300 taka 55 paisa more. How much money has David now?

Make a story with the mathematical sentence
128 taka 50 Paisa – 77 taka 25 Paisa = ... taka ... ... paisa

Riya went to the shop with 100 taka. She bought a book for 69 taka 75 paisa. How much money did she have?

Ratan bought a packet of Chanachur for 45 taka 50 paisa. He gave a 100 taka note to the shopkeeper. How much money did the shopkeeper return to Ratan?

Project: Last year, students of class Three deposited some money from their tiffin money in the clay bank and spent it on the development of the school. You can also save money in the clay bank and do some good work together with the help of teacher.

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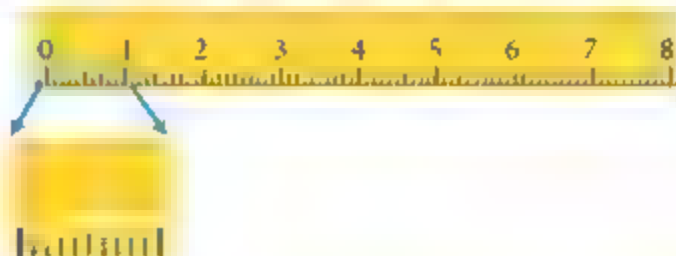
Measurement

Length

How will we measure the difference in length of two pencils of almost the same length?

The length of my pencil seems to be about the same as yours. The difference in their length is very small. As we have learnt in grade 2 centimeters are used to measure the length of small objects. But the difference in length between these two pencils appears to be less than 1 centimeter.

Is there any unit smaller than centimeter?

We use millimeter (mm) to measure the length of an object less than 1 cm and this length is measured by centimeter scale.

1 millimeter or 1 mm

Oh! My pencil is 3mm bigger than your pencil.

1. Let us guess the length of books, notebooks, geometry boxes, tiffin boxes etc. in millimeter. Then measure their length in millimeter by using a scale and complete the table below. Let us check how accurate the approximate length is

Object	Approximate length	Actual length
book		
notebooks		

Unit of length

1 meter = 100 centimeters
1 centimeter = 10 millimeters

While going my village I heard the name of other unit apart from these units But I couldn t recall its name

It is kilometer (km) We use this unit to measure large lengths like distances

1 kilometer (km) = 1000 meters (m)

Unit of length

1 kilometer (km) = 1000 meters (m)
1 meter (m) = 100 centimeters (cm)
1 centimeter (cm) = 10 millimeters (mm)

2 The story of Nipa's visit to her grandparents' house during the Eid holidays is shown in the picture. Let us find out the answers to the following questions.

(1) The distance between Nipa's house and the park is 7 km. Express the distance in meters?

As we know, 1 kilometer = 1000 meters

7 kilometers = 7 x 1000 meters

= 7000 meters

7 km = 7000 meters

(2) What is the distance between the park and the post office in meters?

(3) What is the distance of grandparents' house from Nipa's house?

3 The length of Rima's classroom is 16 meters. Express the length of the classroom in centimeters and millimeters.

We know, 1 meter 100 centimeters

16 meters 16 x 100 centimeters 1600 centimeters

The length is 1600 centimeters

1 centimeter 10 millimeters

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1 centimeter 10 millimeters

1600 centimeters 1600 x 10 millimeters

= 16000 millimeters

The length is 16000 millimeters.

1 Let us divide into several groups and measure the length of different walls of the classroom with a tape. Check the results of one group by the other. What else can be used to measure the length other than a tape? Let us take decisions through group discussions.

2 Let us fill in the blanks.

(1) 24 centimeters = [ ] millimeters

(2) 38 centimeters 9 millimeters = [ ] millimeters

(3) 6 meters = [ ] centimeters

(4) 3 meters 22 centimeters = [ ] centimeters

(5) 2 kilometers 26 meters = [ ] meters

(6) 1 kilometer = [ ] centimeters

kilometers ⟶ meters ⟶ centimeters ⟶ millimeters

3 Let us identify the wrong statement.

(1) The short form of centimeter is cm.

(2) It is possible to compare two objects (small or large) by measuring their lengths.

(3) To measure the length of small object, kilometer unit is used.

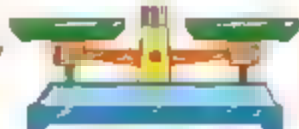
4 Let us match the correct unit by drawing a line.

Distance from Dhaka to Khulna	centimeters
Length of a notebook	meters
Length of a playground	kilometers

Weight

How can we weigh heavy things like watermelon?

The fruit is very big and heavy. How can we weigh it?

We can use a weighing machine. In grade two we have learnt that scales or digital scales are used to measure weight.

Analog scales

digital scales

When we weigh something heavy, we use kilogram. 1 kilogram is equivalent to 1000 grams.

Unit of weight

1 kilogram (kg) = 1000 grams

1 Let's fill a bag with 1 kg of sand and try to understand how it weighs.

I think the bag is filled with 1 kg of sand

Let us weigh with a weighing scale

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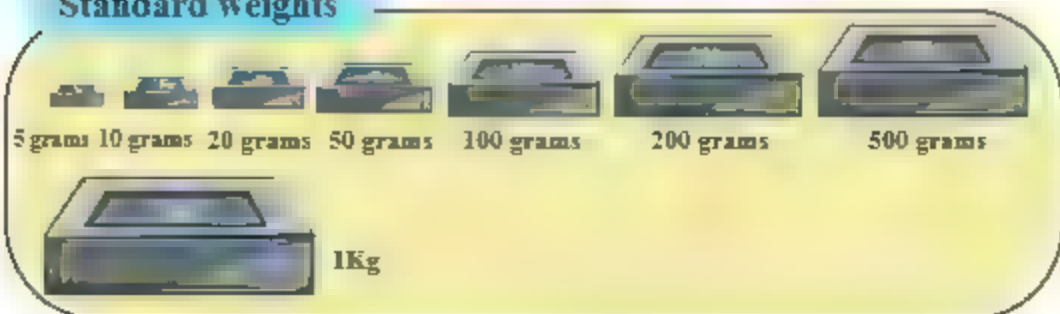
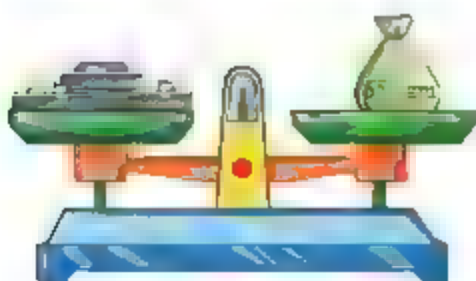
2. Let us make different shapes by using clay mud (example-ball, brick, car, bottle etc.) and measure the weight by weighing scale after guessing.

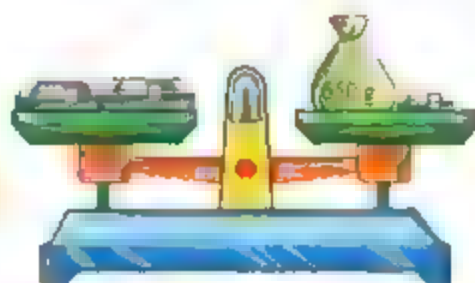
Wow ! All of their weight is equal.

Even if the size of the object varies, its weight remains the same

3. Let us look at the following weighing machines and write the weight of the fruits in the blanks. Let us say which fruits weigh the most.

To measure weight, we use different types of standard weights

Standard weights

4 Let us find the standard weights to weigh a 650 grams object.

I have started with a 500 grams weight which is the closest to 650 grams

I have weighed like this.

5 Let us think how to weigh 3 kilogram 220 grams with standard weights.

1 kilogram × 3
200 gram × 1
20 gram × 1

1 kilogram × 3
200 gram × 2
10 gram × 2

Let us think about more ways of weighing.

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Which standard weights can be used to weigh an object of 5 kilograms 38 grams?

6 Let us express 8 kilograms 447 grams in grams

1 kilogram = 1000 grams

8 kilograms 447 grams = 8 x 1000 grams + 447 grams
= 8000 grams + 447 grams
= 8447 grams

8 kilograms 447 grams = 8447 grams

2 Let us tell the numbers that fits in the blanks and write them.

(1) 6 kilograms = ☐ grams

(2) 7 kilograms 33 grams = ☐ grams

(3) 4 kilograms 670 grams = ☐ grams

(4) 2000 grams = ☐ kilogram

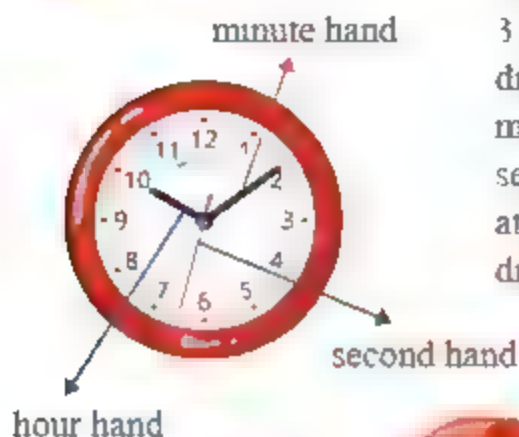
3. In what different ways can an object of 1 kg 620 grams be weighed using one 1 kg, two 500 grams, three 200 grams and six 20 grams standard weights?

4 A packet of salt weighs 1 kilogram 300 grams. Which standard weight are the least needed to weigh it?

5 Let us guess the weight of a book, notebook, dictionary, geometry box, etc. Now complete the table below by measuring their actual weight using a weighing machine. Let's check how correct the assumptions are.

Object	assumed weight	actual weight

Time

What is the relation between hours, minutes and seconds?

In grade 2, we have learnt that there are 3 hands in a clock. The shortest hand indicates hours, the middle hand indicates minutes and the longest hand indicates seconds. In a digital clock, the two digits at the left side indicate hours and the two digits at the right side indicate minutes.

Units of time

second, minute, hour

Relation between units of time

60 seconds = 1 minute
60 minutes = 1 hour

1. Let us find what time it is.

- The numbers from 1 to 12 indicate the hours.
- A clock has 60 small marks
- 1 hour = 60 minutes. So, each mark indicates 1 minute

There are 5 marks between every two consecutive numbers

The minute hand indicates 33 minutes. So the time is 2 hours 33 minutes or 2.33

2 Let us look at the clock and set the time

[8:30] in the morning or half past eight in the morning

[2:45] in the afternoon quarter to three in the afternoon

[10:15] at night or quarter past ten at night

[ ] in the morning or quarter to 1 in the afternoon

[ ] in the evening or quarter past [ ] in the evening

[ ] in the afternoon or half past [ ] in the afternoon

3 Let us write the time in the empty space

What time is it now?

[ ]

What will be the time after 30 minutes? Draw in the picture

[ ]

What was the time 45 minutes ago? Draw in the picture

[ ]

4 Let us tell the time.

5 Let us tick the correct answer

(1) Hour hand is shorter longer than the minute hand

(2) A full rotation of minute hand is equal to 30 minutes 60 minutes

(3) A full rotation of hour hand is equal to 1 hour 12 hours

(4) Clock strikes at 12 onetime two times in a day

(5) The hour hand strikes at 5 in the morning afternoon morning and afternoon

(6) The hour hand completely rotates 10 times 12 times 2 times in a day

(7) The minute hand completely rotates 10 times 12 times 24 times in a day

(8) There are 12 hours 24 hours in a day.

(9) 1 hour is equal to 30 minutes 60 minutes

6 Let us find out how many seconds are in 5 minutes.

As we know 1 minute = 60 seconds

5 minutes = 60 seconds X 5

= [ ] seconds

5 minutes = [ ] seconds

7 Deepu starts 3 20 for the book fair and reaches after 30 minutes. Let us find out the time when Dipu reached at the book fair.

3:20 30 minutes

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1 It takes 20 minutes to go to school from Mita's house. If Mita reached school at 8:25, what time did she leave home?

	20 minutes	8:25

8 Sami went to visit his uncle's house.

How long did Sami take to reach uncle's house after leaving home?

He left home at 9:00 and arrived at 10:00. So he arrived after 1 hour.

(1) When did Sami return home?

(2) How long was Sami at his uncle's house?

2 Poly studies for 2 hours 25 minutes in the morning and 2 hours 45 minutes at night. How much time does he study every day?

9 Let us act focusing on the awareness and importance of proper use of time with the help of the teacher.

We can be divided into two groups. One group can pretend to be aware of the use of time and the other group to be unaware of the use of time. We can highlight the benefits due to proper use of time and the bad effects due to ignorance.

10 Let us make a 'daily routine' of doing the work on time (eg. waking up, sit to study, eating, going to bed, etc.). Let us discuss why we need it.

2025

Let us do

1. Let us tick (√) the correct answer.

(1) Which unit is convenient to use to measure the nip of a pen?

a) Kilometer b) Meter c) Centimeter d) Millimeter

(2) Which unit is commonly used to measure its length?

a) Meter b) Centimeter c) Millimeter d) Kilometer

(3) What is the approximate length of the following pencil without using a ruler scale?

a. 5 cm b. 15 cm c. 50 cm d. 1 m

(4) Which one of the following is correct?

a) 1 kilogram = 10 grams b) 1 kilogram = 100 grams

c) 1 kilogram = 1000 grams c) 1 kilogram = 10000 grams

(5) Which one of the following standard weights will be required to measure 3 kg 220 g?

a) 1 kg + 2 kg + 200 g + 20 g b) 3 kg + 200 g + 10 g + 10 g

c) 2 kg + 1 kg + 220 g d) 3 kg + 200 g + 20 g

(6) The length of Rima's classroom is 20 m. To measure this length with a 25 cm ruler scale, how many times will the ruler scale be placed from one end of the classroom to the other end?

a) 40 times b) 80 times c) 160 times d) 320 times

2025

(7) How many minutes are left to 6 o'clock?

a) 5 minutes　　b) 25 minutes　　c) 35 minutes　　d) 55 minutes

(8) The distance from Nipa's house to her grandfather's house is 3 km. If Nipa walks 500 meters at every 10 minutes, how long will she take to reach her grandfather's house?

a) 30 minutes　　b) 50 minutes　　c) 60 minutes　　d) 70 minutes

(9) It started raining at 12:30 pm and it rained for 2 hours and 45 minutes. When did the rain stop?

a) 3:15 p.m.　　b) 3:30 p.m.　　c) 4:45 p.m.　　d) 5:15 p.m.

(10) How many times does the minute hand of a clock rotate in a day?

a) 10　　b) 12　　c) 24　　d) 1440

2 Fill in the blanks.

(1) 4 centimeters = ☐ millimeters (2) 5 kilograms = ☐ grams

(3) 9000 grams = ☐ kilograms　　(4) 300 centimeters = ☐ meter

3 Express in meters

(1) 2 kilometers　　(2) 5 kilometers 320 meters

(3) 7 kilometers　　(4) 7 kilometers 570 meters

4 Let us express in millimeters.

(1) 3 meters 10 centimeters　　(2) 11 meters

(3) 4 meters 23 centimeters 3 millimeters

5 A bag of potatoes weighs 3 kg 200 grams. Which minimum standard weights do we need to weigh it?

6 Write the time in the blank space.

7 How many seconds are equal to 13 minutes?

8 Mizan walks for 1 hour 30 minutes in the morning and 2 hours 10 minutes in the afternoon every day. How long does he walk every day?

9 Rafiq went to his friend's house at 10:20 and returned at 12:50. How long was he out of the house?

10 It takes Kavya 35 minutes to go home from school. If he reaches home at 4.55, what time does he leave his school?

11 The rain started at 11:00 am and stopped at 12:30 pm. How long did it rain?

2025

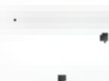
Geometry

Points, lines and planes

 What are points, lines and planes?

In the clear sky at night the stars look like many small dots. Where else do we see such dots?

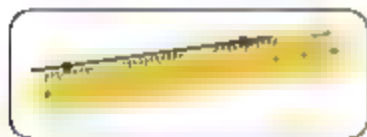
There are small dots in the dice of ludo game. I have also seen dots in the digital clock.

We can easily draw dots with a pencil tip.

 We call these dots **points.**

Points have no length, width or height. It has only position.

1 Let us draw some dots as we wish and draw a figure by joining those dots.

I have drawn 5 dots and have joined them to draw a star.

By placing the scale on the two points and joining them with a pencil, we get the following figure.

Where do we see such a line?

I have seen lines like this in playgrounds and highways

What do we call the outer part of a brick?

We call it **surface**. Specifically in this case, we call it **flat surface** or plane.

All sides of a brick are planes.

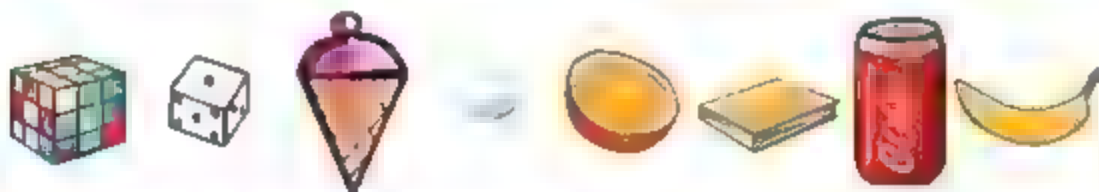
How is the surface of a ball?

Its surface is not flat.
It is curve.

We call it **curved surface.**

2 Let us take a page and find out points, lines and planes from it.

The surface of the page is flat. The side of the page is a line. The place where two sides meet (vertex) is a point.

3 Let us find the surfaces of the following objects and arrange them separately.

Plane	Curved surface	Both

Every surface is plane.

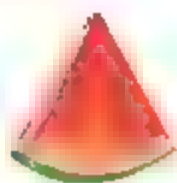
It has a curved surface.

It has both flat and curved surfaces.

1 Let us discuss with two friends to find points, lines, planes and curved surfaces from the things around us (eg. pencils, books, tables, etc.).

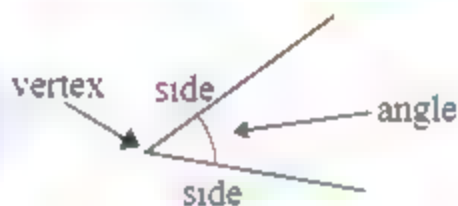
2025

Angle

What is an angle and how can we find different types of angles?

There seems to have similarity among the pictures. But I just can't figure it out.

In every picture there is an angle.

The shape formed by meeting of two lines at a point (the vertex) is called an **angle**.

vertex
side
angle
side

1. Let us find out if there are any angles in the adjacent picture.

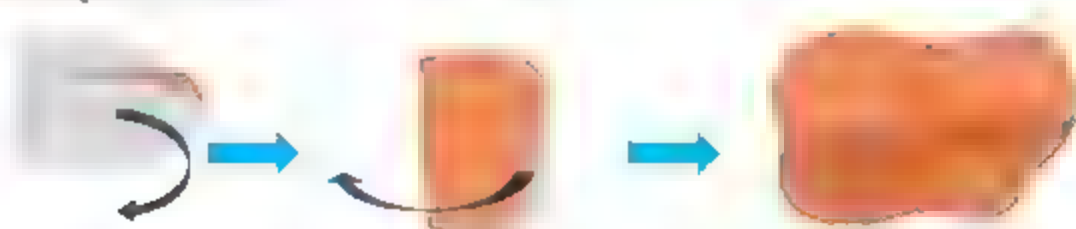
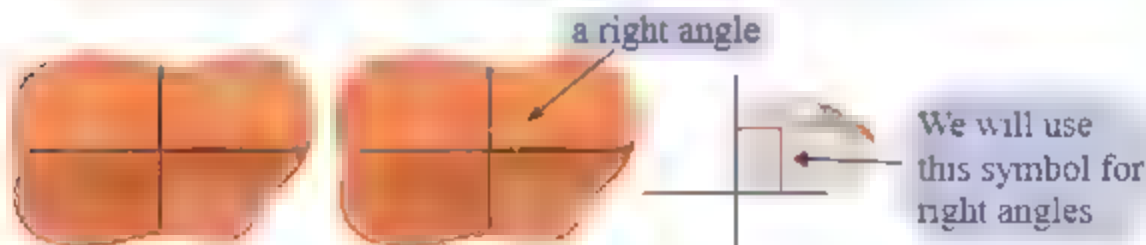
I have found these angles.

I have found these angles.

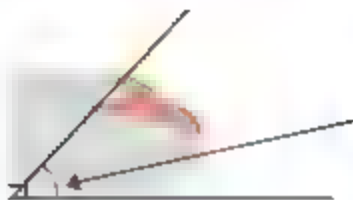
Where else do we see angles?

2 Let us think about the various types of angles

Take a paper of any shape and fold it in the middle. Fold the folded paper crosswise again (as shown below).

The angle formed at the end of the fold is a right angle.
Now open the fold.

Let us draw lines along the folds. 4 angles will be formed at the meeting point of the two lines. Each of them is a right angle.

We will fold and place the two right angles side by side (as shown below).

The angle formed by two right angles together is **a straight angle.**

2025

If the angle is less than a right angle, we call it an **acute angle**

3 Let us make angles with two sticks and demonstrate to the class.

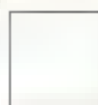
I have made an acute angle and an obtuse angle

I have made an acute angle, a right angle and an obtuse angle.

4 Let us draw different types of angles on the dot paper below and mention their name. For example, acute angle, obtuse angle, right angle etc.

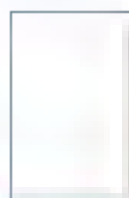
1 Let us draw right angles, acute angles, obtuse angles and right angles by using pencil and scale.

Quadrilaterals

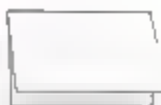
What are the similarities and differences we find in these images?

We have learnt about quadrilateral shapes in grade 2
I think all the three figures are quadrilaterals shapes

All three figures have 4 sides and 4 angles

A closed shape formed by 4 straight lines is called a quadrilateral.

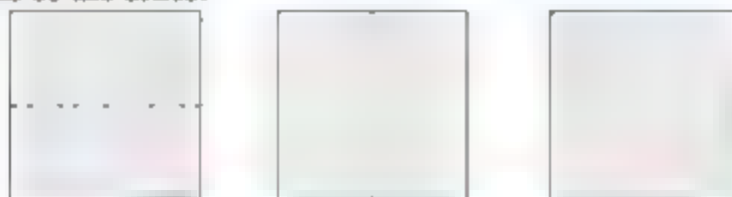
1. What is the difference between these two quadrilaterals?

Let us notice their angles

A quadrilateral whose 4 angles are right angles is called a rectangle.

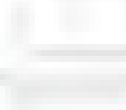
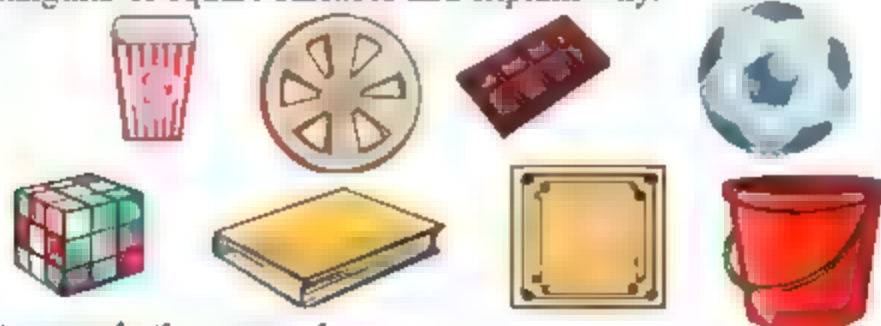
Let us fold the rectangle in different ways (as shown below) and notice the length of the sides.

The opposite sides of a rectangle have the same length.

2 Let us find out the similarities and dissimilarities between these two quadrilaterals

I have found some similarities. The angles of two quadrilaterals are right angles and the opposite sides are equal in length. Both figures are rectangles.

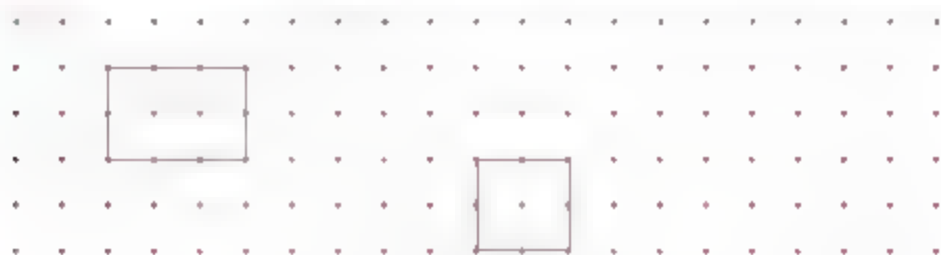
Let us fold the second rectangle as shown below and notice the length of the sides.

Length of each side is the same.

A rectangle whose 4 sides are of equal length is called a square.

All squares are rectangles.

3 Let us discuss with classmates and find out which objects have rectangular or square surfaces and explain why.

4 Let us circle the rectangles

2023

5 Let us tick (✓) on the left side of the figures which are quadrilaterals Write the name on the right side of the figures if they are rectangle or square.

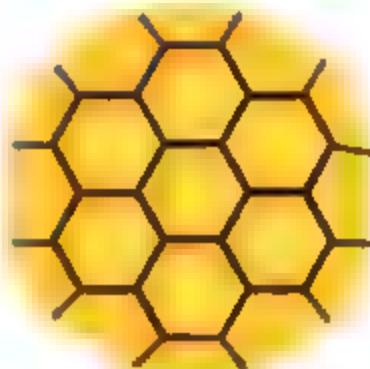
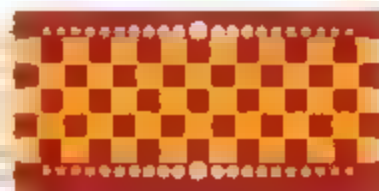
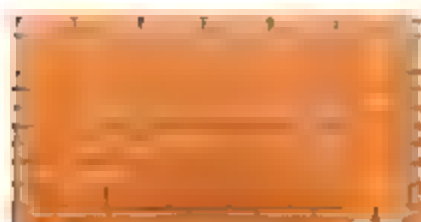
6 Let us draw rectangles and squares on the dot paper below using the scale

1 Let us discuss with a friend to find out rectangles and squares from objects around the classroom (e g books, tables, boards, etc)

2 In each of the following 4 figures, some parts of the square are given. Let us complete the squares.

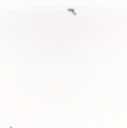
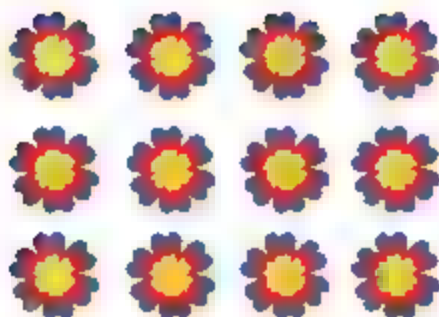
2025

Geometric Pattern

 How do we look for patterns?

In grade 2, we learnt about patterns. A pattern is an arrangement of something (such as numbers, designs or geometric shapes) that follows certain rules. As we look around us, we see a variety of patterns. Beehive has a very nice geometric pattern.

I saw rectangular shape pattern on the walls of our school

The living room carpet of my house is designed in square shape pattern

1 Let us find out if there is any pattern in the following images.

2025

(2)

(3)

I found the pattern in figure 1. A square followed by a triangle has made a pattern and the pattern has been repeated.

I have found the pattern in figure 2. Flower with red petals of smaller size are put on flower with blue petals of larger size and the smallest size flower with yellow petals are placed above them. This pattern has been repeated.

I cannot understand if there is a pattern in figure 3.

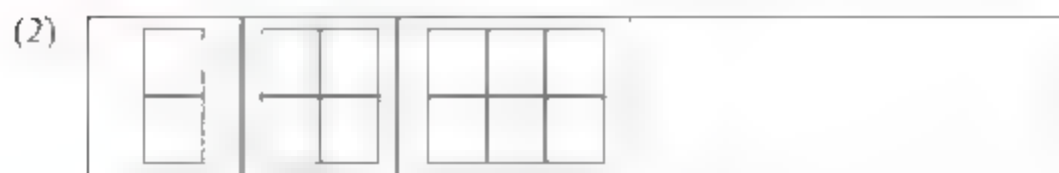
Figure 3 has not created any pattern. To arrange in a pattern

should be replaced by

2 Let us observe the figures below and complete the pattern.

(1)

(2)

(3)

3 Let us create a pattern as we wish using the following geometric shapes

I have made this pattern

I have made this pattern

What other new patterns can we create?

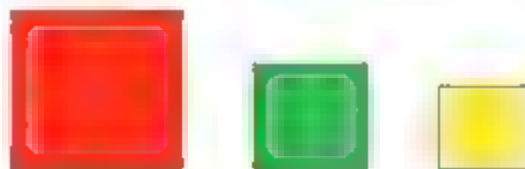
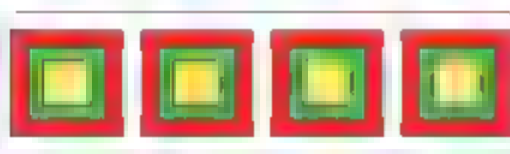
2025

1 Let us create two different patterns as we wish using rectangles and squares.

2 Let us use the following shapes in different ways to make a pattern as we wish

3 A program will be organized on the occasion of Boishakhi festival in our school. Let us cut colored paper and create a favorite pattern design to decorate the walls of the classroom. (Project Work)

A sample is shown.

Let us make a pattern by arranging 3 squares of different colors and sizes placing one on top of the other (large to small) as shown in the figure below.

pattern design

Let us do

1. Let us tick (√) the correct answer

(1) Which one of the following can be used as an example of a straight line?

a) Surface of a sphere b) Edge of a table

c) A curved road d) Surface of a ball

(2) A straight angle is formed by

a) two right angles b) two acute angles

c) two obtuse angles d) one right angle and one obtuse angle

(3) If a piece of paper is folded straight in half twice, which one of the following is obtained?

a) One right angle b) Two acute angles

c) Four right angles d) One obtuse angle

(4) What happens when two straight lines cross each other at right angles?

a) An obtuse angle is formed b) Four straight angles are formed

c) Four right angles are formed d) Two acute angles are formed

(5) Which of the following conditions is mandatory for a rectangle?

a) Four equal sides b) Four right angles

c) Four sides of different lengths d) Only one angle is right angle

(6) You have a robot that can only turn at right angles. If you ask it to walk around a rectangle, how many turns will it take to return to its starting position?

a) 2 b) 3 c) 4 d) 5

(7) Which one of the following is not a pattern?

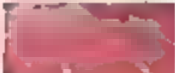
a) Honeycomb pattern b) Wall of square tiles

c) Random dots d) A chessboard

(8) How will you find out whether an angle of a triangle is right angle or not?

a) Fold the triangle crosswise b) Measure with a protractor

c) Draw another line through the triangle d) Guessing on the basis of the shape

(9) Let us identify which sentence of the following is not correct.

a) The acute angle is smaller than the right angle.

b) The straight angle is equal to two right angles.

c) The obtuse angle is greater than two right angles

d) All squares are rectangle.

2 Answer in short.

(1) Emma arranged her books in a V-shape on a shelf. If the angle formed by the book was less than 90 degrees, what type of angle did Emma make?

(2) Using a protractor, Rafi has drawn a 120° angle. What type of angle has he drawn, and how many degrees is it greater than a right angle?

(3) You fold a rectangular paper in equal half and then fold it again into quarters. If the original rectangle is 12 cm long and 8 cm width, what will be the length and width of the folded rectangle after the second fold?

(4) Write the names of the following angles and explain the reasons.

2025

3 Match

4 When can a quadrilateral be called a square?

5 Complete the following patterns by filling in the blanks

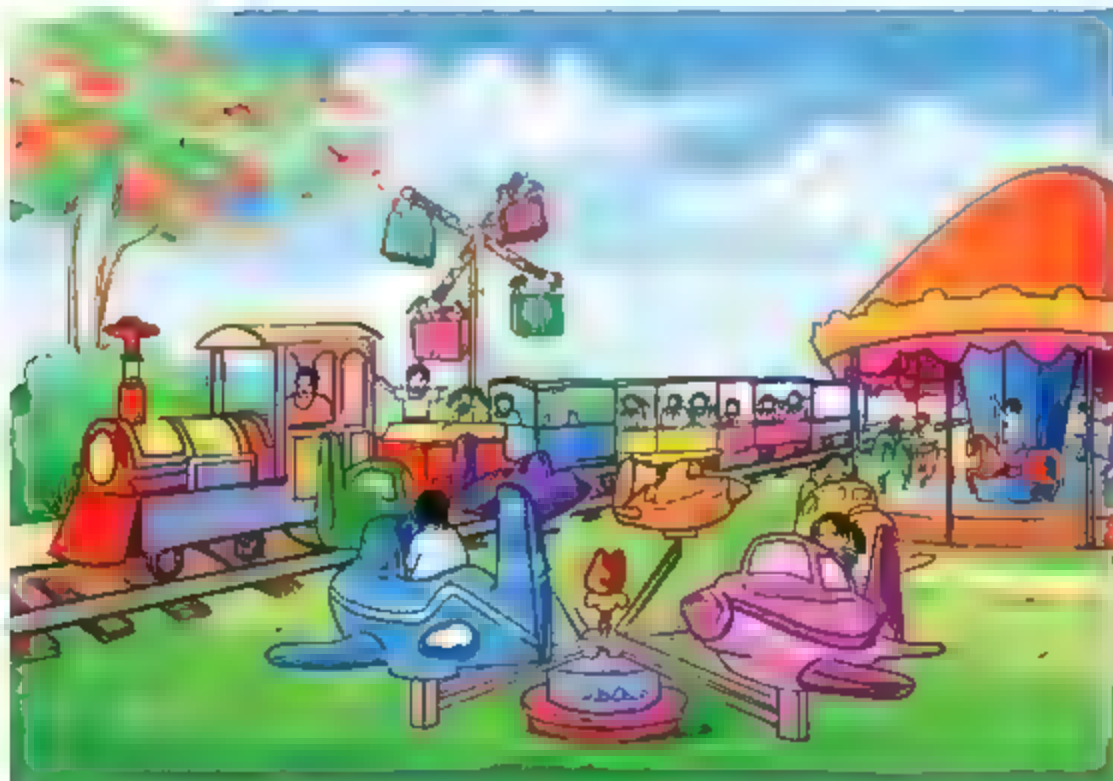
6 Find out whether the following figures are patterns. Tick (✓) the correct answer and explain the reason.

(a) (a) Yes No

(b) (b) Yes No

Data Collection and Arrangement

Creating Tables

Students were taken to Shishu Park for a fun trip from school and they rode various rides. How many students rode on which ride?

Shishu Park

How can we calculate easily?

We need to make a list. In this case we can use tally marks.

In grade 2, we have learnt to use tally marks to calculate The tally marks is a quick way to keep track of numbers in groups of 5 One vertical line is drawn for each of the first 4 numbers, but 5th line is drawn across the prevoius 4 lines Then the count continues by tally marks with a little gap

1 Let us complete the table on the right side using the tally marks and find out how many students rode on which ride.

(1) Which ride had the largest number of students ?

(2) Which ride had the least number of students?

(3) How many students rode on Nagordola and the merry-go-round?

Game	Tally marks	Number of students
Children's toy train	𝍸 𝍸	10
Nagar-dola		
Flying plane		
Merry-go-round		
Total		

1 The teacher randomly mentioned the names of some colours repeatedly in the class Let us listen carefully and record the number of colours using tally marks and then fill in the table on the right side by expressing the tally marks as numbers.

(1) Which color did the teacher mention the most?
(2) How many times did the teacher mention about red and yellow colours?

Color	Tally marks	Number
Red		
Blue		
Yellow		
Green		

2025

Pictograph

A fruit basket contains 5 apples, 4 bananas, 6 guavas and 7 pineapples. How to arrange them easily?

I have arranged it like this

I have arranged them like this

apple		
banana		
guava		
pineapple		

These are pictographs. In pictographs, pictures or symbols are used to represent data.

1 The number of grade 3 students participating in the annual sports competition is given in the table on the right side. Let us express it with the help of pictograph.

Name of the competition	Number of students
Race	50
Cock fighting	20
Dress as you like	15
Painting	35

Here, the number of students is very large.

We can arrange the number of students into groups of 10.

Race	● ● ● ● ●
Cock fighting	● ●
Dress as you like	● ◖
Painting	● ● ● ◖

Here, 10 students have formed a group and the group is expressed by ● symbol.

Each ● 10 students

Large amount of data can be easily visualized in pictograph by making groups.

Wow! Pictograph helps us to express and compare large numbers.

2025

Can we show the pictograph in other ways?

(1) How many students are equal to ◖?

(2) Which competition has the largest number of students participating in?

(3) Which competition has the least number of students participating in?

1 The table on the right shows the memo of the sales of various vegetables in a vegetables store. Let us express it through pictograph.

Vegetables	Price
Eggplant	35
Cauliflower	20
Lemon	60
Cucumber	50
Gourd	15

2 A pictograph of favorite flowers of students of a school has been given below. Let us discuss with the classmates and answer the following questions.

Rose	
Jesmine	
China rose	
kadam	

Each ✕ = 20 students

(1) ____________ flower is liked by the least number of students.

(2) ____________ students like jasmine.

(3) Total number of students is ____________ .

2 The students of grade 3 went on a trip to a zoo. Let us start to draw a pictograph of the vehicles they saw on their way to the zoo.

(1) Students saw 8 cars. Each ⧗ = ☐ vehicle?

(2) They saw ☐ more bikes than rickshaws.

(3) They saw 6 double-decker buses. They will draw ☐ more ⧗ in the pictograph

(4) Number of bicycles was ☐ less than bike.

3 A pictograph of favorite fish of few students has been given below. Let us answer the following questions.

Hilsa	☆ ☆ ☆ ☆
Prawn	☆ ☆ ☆ ☆ ☆ ☆
cat fish	☆ ☆
rohu	☆ ☆ ☆

(1) Hilsa is the favorite fish of 9 male students. How many female students like Hilsa fish?

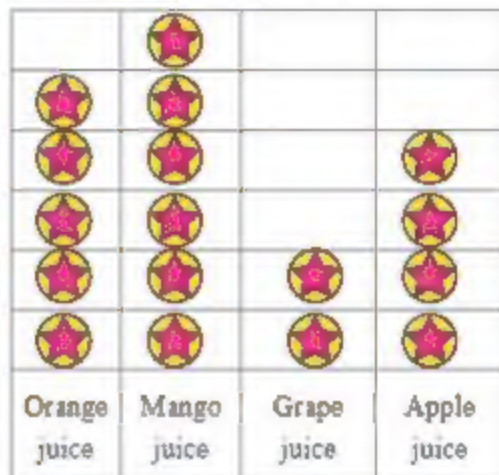
(2) 12 female students like prawn. How many male students like prawn fish?

(3) 4 male students like salmon carp. How many more female students like salmon than male students?

Let us do

1. Let us make a list of different plants around the house and make a table and express it through pictograph.
2. Let us compare the two diagrams below. Can we call both of two are pictograph? Let us discuss with classmates and give opinion.

Orange juice	★★★★★
Mango juice	★★★★★★
Grape juice	★★
Apple juice	★★★★

each ★ = 5 students

3. The pictograph of books of different types of a library is given below.

Bengali	▰▰▰
Mathematics	▰▰▰▰
English	▰▰▰▰
Social science	▰▰

each ▰ = 10 books

(a) The largest number of books is ———— and ————.

(b) The number of ———— books is 30.

(c) The total number of books is ————.

The End